Public Utilities

FORTNIGHTLY

October 28, 1937

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

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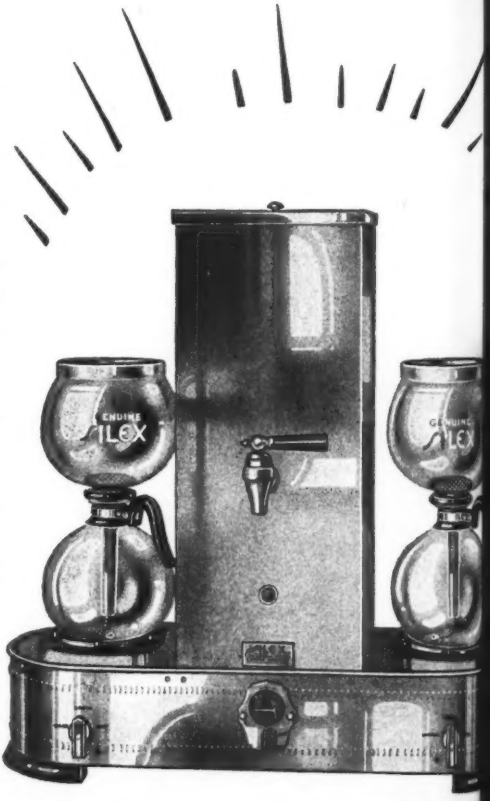

Genuine SILEX

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Editor—HENRY C. SPURR
Associate Editors—ELLSWORTH NICHOLS, FRANCIS X. WELCH
Contributing Editor—OWEN ELY

Public Utilities Fortnightly

VOLUME XX *October 28, 1937* NUMBER 9

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY *can be found by consulting the "Industrial Arts Index" in your library.*

¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

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Pages with the Editors

WHILE the ordinary folks in and out of Washington were concerning themselves with the petty quarrels of the day, such as whether the Giants would beat the Yankees or whether Justice Black ever really turned in his white sheet back in 1926,, administration leaders were thinking big thoughts—planning ahead for America's destiny.

THERE is something about the wide open spaces that is conducive to big thoughts and visionary contemplation. On his recent trip through Yellowstone Park and the Columbia river valley, President Roosevelt gave evidence of this communion with nature, especially in his speech at the site of Bonneville dam. More specifically, the President indicated that he intends to push with all his might the bills introduced at the last congressional session which would set up seven (or eight) regional planning authorities a la TVA.

THE President assures us that such legislation would be not only the forerunner of a widespread government power program, but a liberal antidote for the abuse which we, as a people, have visited upon our sacred heritage —the Good Earth—during the last four or five decades.

THROUGH ignorance, and, in some unfortunate instances, through greed, according to the President, we have been scalping God's acres at a fearful rate, leaving the wounded soil to bake in the sun, flood in the rain, and blow right up in the air if the wind is just right (or just wrong). The need for checking this sort of thing is hardly debatable. The President wants to set up planning boards to think these problems through: how to put back a protective ground cover, and how to control the watersheds in the triple interest of agriculture, public safety, and power production, with maybe an extra side dish of navigation now and then.

© *Harris & Ewing*

G. W. LINEWEAVER

A government of regional provinces may be superimposed upon our states.

(SEE PAGE 515)

ALL of this points to much discussion about the so-called seven TVA bills at the next session of the Congress. That being the case, we are able to present a timely discussion of the problems involved by one who knows what these bills really signify. Will the new regional boards really do all the fine things planned? How much relative importance has the power angle and how much will be its relative cost? Will there be any rate uniformity between the different zones, or will there be rivalry or possibly a battle royal? These are only a few of the questions we wanted answered.

WELL, we wrote them all down on a piece of paper and handed it to that ornament of Virginia journalism, G. W. LINEWEAVER, former secretary of the Federal Power Commission and now temporarily attached to the staff of the Brookings Institution. We knew that MR. LINEWEAVER, with his background of knowl-

TULLY NETTLETON

What will the unions do if Uncle Sam takes over labor regulation?

(SEE PAGE 525)

edge of national power problems, would know the answers if anyone did. The result was a two-part article, the first instalment of which appears in this issue beginning page 515.

CHARLES MORRIS MILLS, who wrote the article about a certain large holding company (beginning page 533), is a newcomer to the FORTNIGHTLY but an old hand at contributing articles on finance and economics for such publications as *The New York Times, Barron's Weekly, This Week, New York Herald Tribune*, etc. Born in Cleveland, Ohio, he graduated from Amherst and Columbia just in time to go overseas as an officer in the AEF. Since then he has held consulting posts with the New York State Department of Labor, National Industrial Conference Board, Standard Oil Company of Ohio, and other concerns. His present residence is in New York city.

IN our October 14th issue we published a piece about labor union strikes in public utility industries which seems to have upset a few of our good friends on the Left. Why, they ask, hasn't the utility worker as much right to strike in defense of his rights as any other kind of a worker? Why, indeed? It so happened that we had already arranged to publish in this issue (beginning page 525) a sequel in the form of a more sympathetic view of the utility workers' position on the question of strikes.

TULLY NETTLETON, author of this second instalment in our little labor article series, is unable to bring himself to the conclusion that utility strikes are desirable or tolerable. In truth, MR. NETTLETON concludes that it doesn't make much difference what we may think about utility strikes in the abstract, the brutal fact remains that the people just won't stand for them. However, he appreciates the viewpoint and problem of the organized utility worker and writes with commendable fairness on the entire situation.

MR. NETTLETON, who is now with the Washington bureau of the *Christian Science Monitor*, first became interested in public utilities while a student at the University of Oklahoma from which he graduated in 1923. Subsequently he covered a state house beat for the *Daily Oklahoman* at Oklahoma City and for the *Monitor* at Beacon Hill in Boston. He has been a careful follower of state commission regulation throughout his career.

INCIDENTALLY, President Roosevelt's Bonneville speech contained some comment about the necessity for decentralizing our large cities which follows pretty closely along some of the lines of reasoning contained in the recent report of the National Resources Committee on Urbanism. The NRC report, it will be recalled, pointed to the economic weakness of overgrown "chronically depressed communities," and the President would remedy this by regional planning.

WONDER what the President thinks, however, about the other NRC report on Technological Trends which stated that water power might prove in many instances to be more costly than steam-generated current? Will the regional planning authorities be able to work this out also? It might be a good idea to watch for the second instalment of MR. LINEWEAVER'S article on the seven TVA bills which will appear in the next issue of the FORTNIGHTLY if you also are curious about this problem.

WE are publishing, in addition to the regular features of this issue of the FORTNIGHTLY, a full text reproduction of the three addresses delivered before the Section of Public Utility Law at the recent annual convention of the American Bar Association held in Kansas City, Mo. These addresses were delivered by Hon. Elmer A. Smith, of Chicago, chairman of the Section of Public Utility Law, Hon. James L. Fly, general counsel of the TVA, and Hon. Carl I. Wheat, counsel for the special telephone investigation of the FCC.

THE next number of this magazine will be out November 11th.

The Editors

CHARLES MORRIS MILLS

What about the largest holding company?

(SEE PAGE 533)

In This Issue

In Feature Articles

In Financial News

In What Others Think

In The March of Events

In The Latest Utility Rulings

Appendix—American Bar Association

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

C. E. WILSON
Vice President in Charge of Sales, General Electric Company (Bridgeport, Conn.).

"There is no way to better living that isn't electrical."

CARROLL MILLER
Chairman, Interstate Commerce Commission.

"The logical solution of the railroad difficulties seems to be—one national railroad system."

ERNEST G. DRAPER
Assistant Secretary of Commerce.

"If we wish to maintain a political democracy we must preserve an industrial democracy as well."

A. F. RICE
Manager, Market Development, Southern California Gas Company.

"By the common law, right of possession, the domestic fuel service for American homes belongs to the gas industry."

EDITORIAL COMMENT
Electrical World.

"Practically all of the [water power] sites that the government is developing were surveyed long ago by our private utilities and found wanting economically."

WILLIAM E. LEE
Commissioner, Interstate Commerce Commission.

"We are so linked up with and dependent on our railroads that it behooves us not only to watch their rates, but also to interest ourselves in their expenditures."

DOROTHY THOMPSON
Newspaper columnist.

"We are asked [by liberals] to recall only that Mr. Justice Black has waged heroic war on the utilities. Whatever else he may have done is really unimportant."

ROBERT E. HEALY
Member, Securities and Exchange Commission.

"The Holding Company Act was not intended to supplant state regulation but to supplement it by giving a Federal agency—the Securities and Exchange Commission—jurisdiction over the uncontrolled holding companies."

PHILIP SPORN
Vice President and Chief Engineer, American Gas and Electric Company.

". . . no utility company has a right to proceed with a facility unless the prospective return is adequate. It cannot, and has no right to, indulge in any grandiose schemes of interconnection because they fit so well into a preconceived paper picture of how a group of systems ought to be coördinated."

DAVID LAWRENCE
Newspaper columnist.

"Fascism is no longer a cloud on distant horizons—it is here in these United States of America in the year 1937."

FRANK R. McNINCH
Chairman, Federal Communications Commission.

"It is both interesting and significant to note that, as electric rates have gone down, production and consumption have gone up. It has been and is a short-sighted policy to keep electric rates 'as high as the traffic will bear.'"

N. G. SYMONDS
Vice President in Charge of Sales, Westinghouse Electric & Manufacturing Company.

"Too often coöperatives have been organized to build inadequate lines and that only meant trouble for the utility that served the line, the manufacturer who furnished the material, and the customer who used the service."

JOHN T. MADDEN
Professor of Accounting, New York School of Commerce.

"It may be that when all the evidence is in, public ownership will be found preferable to public regulation and private ownership despite absence of evidence pointing to any industry that has treated consumers and investors better."

GEORGE AIKEN
Governor of Vermont.

"Shall the Federal government have the authority to take from a state without its consent and with or without recompense the natural resources [reservoir and power sites] upon which the industry, the income, and the welfare of the people may depend?"

JOSEPH B. EASTMAN
Member, Interstate Commerce Commission.

"Before long we must find a way of starting on the job, which is 'coördination' or fitting the various forms of transportation into a system in which they will work with and for each other in every appropriate way and work against each other only within the limits of what may be termed a sane and healthy competition."

EDWY L. TAYLOR
Member, Public Utilities Commission of Connecticut.

"It is essential . . . that every rate of a motor carrier shall be so determined with definite relation to the cost of operation in order that each type of traffic shall provide adequate compensation to the carrier and so preserve the motor carrier industry, avoid discrimination, and provide reasonable rates for the shipper."

WALTER M. PIERCE
U. S. Representative from Oregon.

"It [raising utility taxes] will be like the story of the old woman and the pig, in the nursery rhyme, 'butcher will begin to kill cow, cow will begin to drink water, water will begin to quench fire'—all my colleagues have recited this nursery rhyme—and so on, until the objective is accomplished. Utilities will begin to pay just taxes, taxes will encourage citizens, citizens will see potentialities of electric system, electric system will become public property, and then district tax troubles, high electric light rates, slums, a measure of the profiteering and corruption will vanish in the night . . ."

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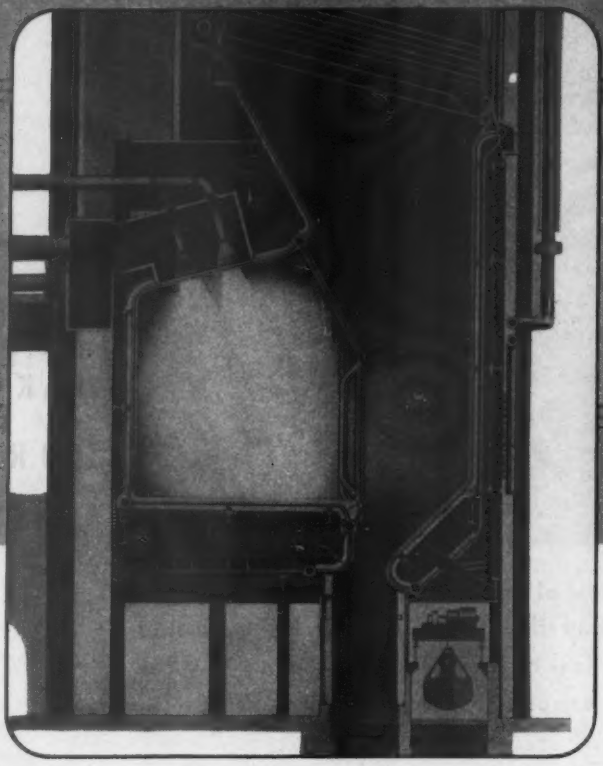

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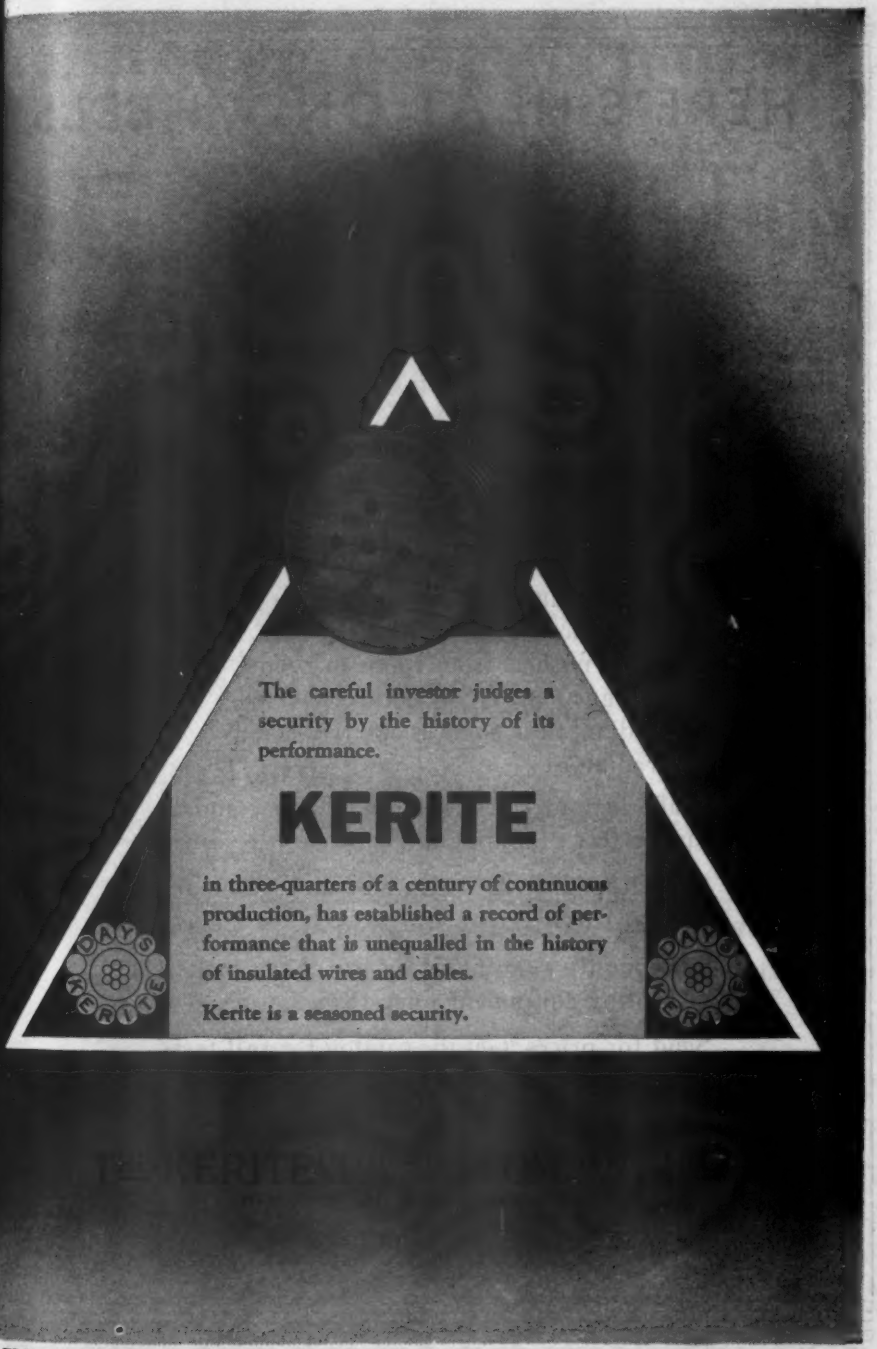

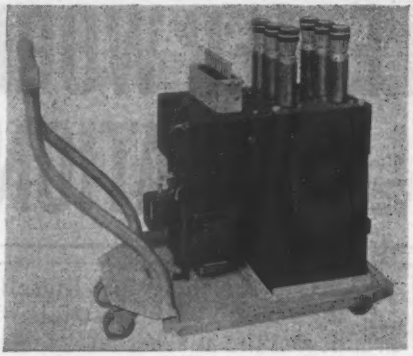

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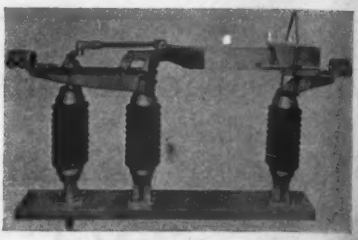

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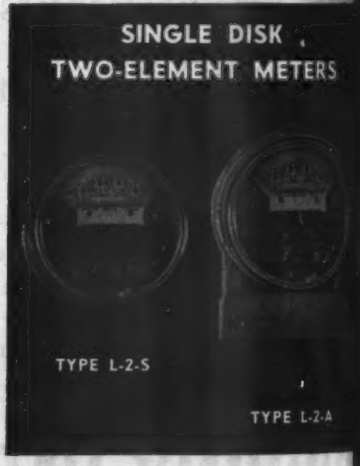

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The sale of Modern Lighting for Modern Store Fronts should *begin at Home!*

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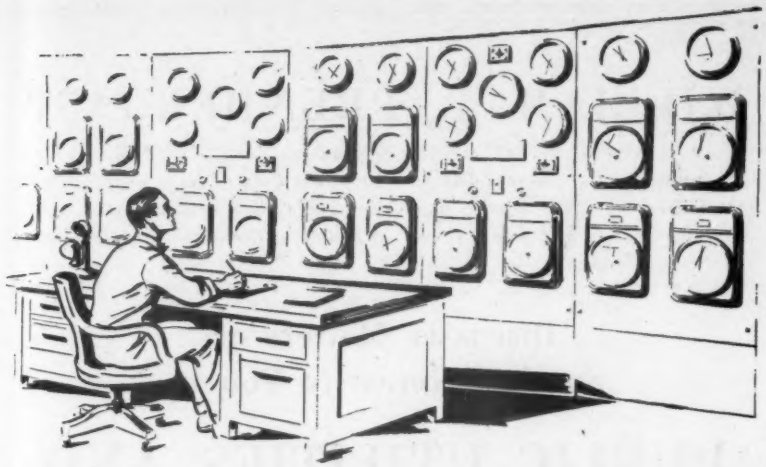
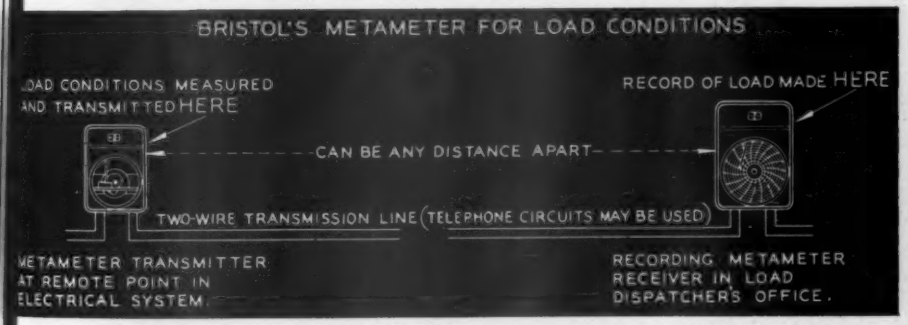


CHARTS IN DISPATCHER'S OFFICE

show loading miles away



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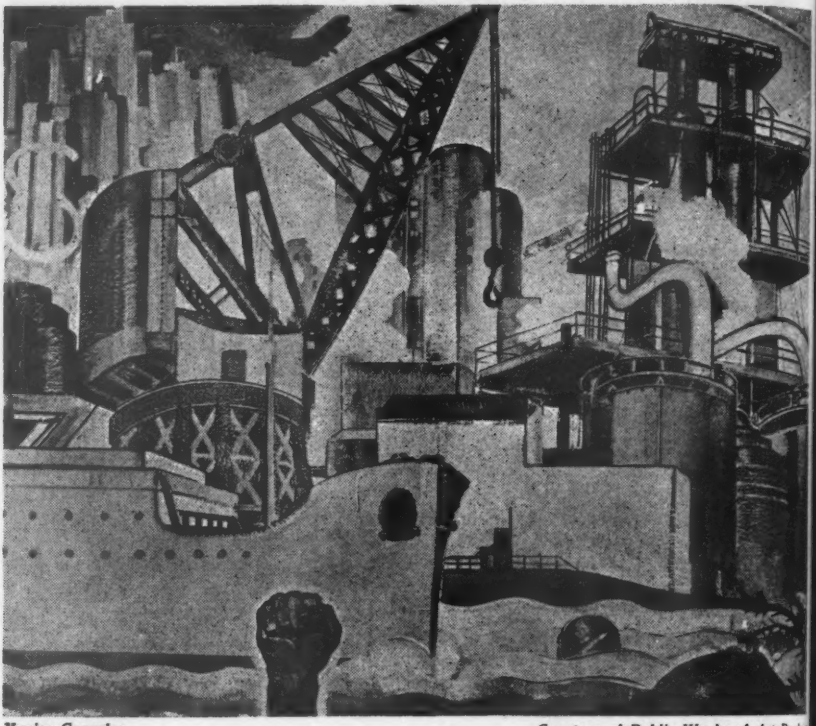
Utilities Almanack

OCTOBER

28	Th	¶ *Railway Electric Supply Manufacturers Association ends session, Chicago, Ill., 1937.*
29	F	¶ *National Electrical Manufacturers Asso. ends convention, Chicago, Ill., 1937.* ¶ *Amer. Inst. of Steel Const. ends meeting, White Sulphur Springs, W. Va., 1937.*
30	Sa	¶ *Mid-Continent Oil & Gas Association of Texas concludes meeting, Dallas, Texas, 1937.*
31	S	¶ *American Trucking Association will hold annual convention, Louisville, Ky., November 15–17, 1937.*

NOVEMBER

1	M	¶ *Oklahoma Municipal League will hold annual convention, Enid, Okla., November 15–17, 1937.*
2	Tu	¶ *National Bureau of Standards will hold conference on corrosion and protection of pipe lines, Washington, D. C., November 15–17, 1937.*
3	W	¶ *New Jersey State League of Municipalities will hold meeting, Atlantic City, N. J., November 18, 19, 1937.*
4	Th	¶ *American Water Works Asso., Virginia Section, opens meeting, Richmond, Va., 1937.* ¶ *American Water Works Asso., Missouri Valley Section, convenes, Omaha, Neb., 1937.*
5	F	¶ *National Municipal League will convene for session, Rochester, N. Y., November 18–20, 1937.*
6	Sa	¶ *Mississippi Valley Association will convene for session, St. Louis, Mo., November 22, 23, 1937.*
7	S	¶ *Highway Research Board will hold annual meeting, Washington, D. C., December 1–3, 1937.*
8	M	¶ *American Water Works Association, Wisconsin Section, starts convention, Green Bay, Wis., 1937.*
9	Tu	¶ *American Petroleum Institute convenes for session, Chicago, Ill., 1937.*
10	W	¶ *Annual Gas School Conference opens, Iowa State College, Ames, Iowa, 1937.*



Xavier Gonzales *Courtesy of Public Works of Art Proje*

"War"

Municipal Auditorium, San Antonio, Texas

Public Utilities
FORTNIGHTLY

VOL. XX; No. 9 OCTOBER 28, 1937

The Proposed Regional Plan Of Federal Authorities

No. 1. The Norris and Mansfield Bills

THERE is no end to the discussion of the constitutionality of what the regional bills propose, says the author; but there is one field in which the revolutionary measures will have a disturbing effect and that is in the existing spheres of Federal operations. The limit of what may be done may be gauged only by the ability of the strongly entrenched factors in government fields to balk any entrenchment on their present preserves.

BY G. W. LINEWEAVER

"LIKE the Royal Northwest Mounted Police, the Senator from Nebraska always gets his man."

Thus observed Senator W. R. Austin, Republican of Vermont, of the Independent Senator George W. Norris, Nebraska, in debate on the latter's resolution proposing an investigation by the Federal Trade Commission of utility propaganda against public ownership.

The senior Senator from the native state of Calvin Coolidge was not speaking facetiously; and he recognized the traditional perseverance of Senator Norris in behalf of any legislative objective he might undertake, whether in the Congress or in his home state of the Western Plains. Neither was it wholly to recent accomplishments that Senator Austin referred.

Thirty years ago, as a comparatively obscure Representative, Norris almost single-handed led the fight that broke the czaristic rule of "Uncle Joe"

Cannon as Speaker of the House of Representatives. Nominally a Republican as he continued to be until 1936, he revolutionized the rules of the House and became the first "insurgent" that was to plague his party or whatever party might be in power.

In more recent years, the adoption of a unicameral legislative set-up in Nebraska was a Norris move, opposed by the political powers of both parties but supported by the people at the polls. Initiation of the amendment to the Constitution of the United States, eliminating the "lame duck" sessions of a retiring Congress and its speedy ratification, implemented a revolutionary proposal.

Implacable foe of what he characteristically denominates as the "power trust," the Public Utility Holding Company Act of 1935 in a large part may be ascribed to the Nebraska Senator. For it is no secret that but for his adroit maneuvers, the "death sentence," so-called, would not have been incorporated in the Senate bill, even with the powerful support given the proposal by the President and his administration.

THE Tennessee Valley Authority Act of 1933 and subsequent amendments represent the results of a 15-year battle that he led to inaugurate Federal power development on the Tennessee river on a scale that perhaps even his vision did not contemplate. Certain it is that he could not have foreseen the magnitude of the undertaking or that a national administration, with the backing of a large majority in Congress, would provide a couple hundred million dollars in four years in addition to the initial investment of $60,000,000 or more in power facilities at Muscle Shoals, Ala.

Looking, so to speak, for new fields to conquer, Senator Norris had for several years a plan to create a super-TVA embracing all of the Mississippi valley; but he did not find the open-handed welcome of such an undertaking that he might have anticipated. The Mississippi valley and the Mid-Western area have long been more interested in flood control than in the ramifications of a giant multipurpose undertaking, involving power development and the various other activities of a social character that TVA has sought to emphasize.

In consequence, the Mississippi valley people ganged up on the Senator from Nebraska and demanded that the Corps of Engineers, War Department, be undisturbed in consummating and executing plans to eliminate the menace of floods. The Mississippi Valley Authority Bill as a single piece of legislation was effectively squelched; but not so the ideas of Senator Norris for regional planning and public works developments by area authorities rather than by established agencies of the Federal government, for some of which he has no high regard.

PRESIDENT Roosevelt was no doubt well sold on the planning idea, for his National Resources Committee had been favorable to planning on a regional basis, but there have been suggestions that experience with the conflicting views of David E. Lilienthal and Dr. Arthur E. Morgan in TVA have not made Mr. Roosevelt so happy as to operations by an independent board. It may be that the President, mindful of the grief that might come

from sharp internal conflicts in six new regional authorities, was willing to let Congress take its choice between the Norris plan, embodied in Senate Bill 2555, and the somewhat modified and less all-embracing measure introduced by Representative Mansfield, Texas, chairman of the House Rivers and Harbors Committee.

Fundamentally the outstanding differences in the two bills are these:

1. The Norris bill provides for regional conservation authorities that would be virtually supreme in their respective areas—certainly so far as electric power development and related operations are concerned. Frankly in the extreme, the Senator announced that the regional commissions of three members should be independent of "political" control by any executive outfit in Washington. He would have the agencies do their own planning, have plenary powers in dealing with states and other public agencies, and execute projects, after approval by the President. Congress would be expected to provide the necessary funds.

2. The Mansfield bill separates planning from power operations. It would set up a regional planning director but would authorize the President to create regional power authorities with jurisdiction coinciding with that of the area planner. Advisory boards for power and planning would be provided. One-man responsibility and control is the underlying personnel phase that would obviate conflicting views that have so frequently hampered commissions in the Federal service.

BOTH bills contemplate expansion of the territory of the Tennessee Valley Authority to embrace the Cumberland river in Kentucky. Each provides that within six months the President shall set up a Columbia Valley Authority to take over the Bonneville power project in the Pacific Northwest. Eventually it is presumed the $400,000,000 Grand Coulee project in Washington state, now being constructed by the Bureau of Reclamation, Department of Interior, would come under the CVA, perhaps before its first units are completed.

The clash of ideas in the Norris and Mansfield bills as to 3-man or single-headed authorities developed a peculiar quirk. Representative Rankin, Mississippi, who has become something of an understudy of Senator Norris as a nemesis of private utilities, introduced

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the Norris bill in the House verbatim, but had a change of heart on this one feature. He favors a one-man authority and thereby brings into bold relief his recent disagreement with Dave Lilienthal, over the latter's negotiation of a TVA contract with Harvey Couch's Arkansas Power & Light.

Previously Rankin had taken sharp issue with Dr. Morgan's views on a power pool; and now that Lilienthal is in his bad graces, the present TVA régime may lose one of its most ardent defenders. The Mississippian has not deserted TVA by any means, but Lilienthal's failure to require Mr. Couch's company to retail energy at "yardstick" rates produced an interesting disturbance.

FROM one point of view, these and other developments that have revealed a degree of unhappiness in the official TVA family may indicate that the days of blissful peace in the Roosevelt's administration's power family are approaching an end. But that is another story that has nothing directly to do with this latest move of Senator Norris to revolutionize the Federal government's method of handling all phases of conservation subjects, from water utilization to wild life and recreation, and the relationship of the Federal government to states and localities.

Impetus given the Norris and Mansfield bills, in respect to planning, expansion of TVA, and early creation of a Columbia Valley Authority, by President Roosevelt's special message of June 1st, was checked somewhat by the illness in midsummer of the Nebraska Senator. However, he had maneuvered the hearings before a friendly Senate Subcommittee on Agriculture and Forestry to the disappointment of flood control and navigation advocates, who preferred the Senate Committee on Commerce. It would have had short shrift in the latter committee, and its patron knew it.

Even though ill, the spirit of Senator Norris made itself evident through the aggressive support given his plan by Senators Pope, Idaho, and Schwellenbach, Washington, who with a group of twenty or more of their colleagues, are prepared to carry on the Nebraskan's battle. It may be that the number of Senators who are willing to wage a war for this phase of a New Order may greatly exceed the score that are known to favor the Norris version of conservation and public power expansion, and admittedly, that is a sizable block to start with.

THE crusading spirit of Norris was not evidenced in the reception accorded the Mansfield and Rankin bills in desultory hearings before the House committee before Congress adjourned. Yet, the promise of more rapid Federal development of power projects throughout the country is a tempting bait. It has worked successfully for four years and no one discounts the potential influence of TVA as an example of the Federal government's liberality in the interest of regional development.

A hint of this feeling in the House of Representatives' rank and file was given in May, when Representative Rich, Pennsylvania, led an antiadministration onslaught on further appropriations for Grand Coulee in the Pacific Northwest during consideration of the Interior appropriation bill.

Broad Powers of Superauthorities

"In some of these twenty-eight states, the water, land, and other conservation problems are not serious, but nearly all at sometime or another would have occasion to deal with one or the other of the superauthorities. The broad powers sought for the new agencies are such that there is scarcely any activity affecting water or shore usage or touching conservation that would not require consultation with or an application for approval by the appropriate regional set-up."

"This is nothing but another TVA where there are nothing but jack rabbits," shouted the economy-minded Pennsylvanian.

Were his economy sentiments applauded? Not much. He was greeted by shouts of derision and the TVA idea acclaimed. Just previously the House had made a gesture against providing funds to start the new Gilbertsville dam in the TVA system, but finally yielded.

With congressional elections coming on next year and the Senate to be confronted early in January with a favorable report on the Norris bill, if present plans mature, none but an optimistic opponent doubts that the second session of the Seventy-fifth Congress will see Senator Norris making progress toward getting "his man" in some sort of fashion. But the territory he seeks to cover may be the rock on which the craft will founder.

Were the Norris bill to follow the usual bent and be directed solely at Federal power expansion, with promises of cheap energy, and a few new attacks on the chief patron's pet aversion—the "power trust"—the outlook would not be so difficult to foresee. But, both the Senate and House measures, in one form or another, step on so many influential and strongly entrenched official toes, Federal and state, that complications of a decided character can easily be foreseen.

No question can be legitimately raised about the value and importance of regional planning under proper Federal supervision, coördinated with state and local activities. For several years that course has been prosecuted fairly successfully by the National Resources Board and its successor, the National Resources Committee, headed by Secretary of Interior Ickes, as chairman, and composed principally of cabinet officers.

The actual work has been largely directed by Charles W. Eliot, executive officer, and it has produced a high degree of coöperation with Federal, state, and local agencies. Its fact-finding has been clear-cut. It has been in-

fluenced little, if any, by political or administration policy. In a comprehensive report on national and regional planning, the Resources Board raised some interesting points — in fact stressed them—relating to the possible workings of regional authorities. In several instances these conflict with the philosophies underlying both the Norris and Mansfield bills.

THREE points are of particular interest, in view of reactions attributed to Federal and state agencies that have been inclined to look askance at the objectives of the regional authority bills.

First, while dealing kindly with the Tennessee Valley Authority, its earnestness and desire to make a record, a warning was sounded as to what a "young and ambitious agency" with full regional authority could and would do to existing Federal activities. It was pointed out that TVA was perfectly willing to secure coöperation with other governmental outfits in its territory but that it was its own judge of what should be given in return.

Second, the manner in which TVA secured the alliance of state and local authorities in its area was suggested as rather expensive for the Federal Treasury. In what was something of a final warning, it sounded objections to establishing regional authorities, even in planning, independent of existing departments at Washington. The NRC declared that the burden of directing regional activities and of threshing out their reports and recommendations should not be loaded on an "overworked President," but should be cleared through an established executive department.

These observations, rather briefly sketched from Regional Factors in National Planning, National Resources Committee, 1935, may be supplemented by reference to the bases it suggests for regional jurisdiction. It recognized that there were half a dozen or more controlling factors in prescribing the territorial limits of an authority, both as to planning and operations. The Norris and Mansfield bills adopted the drainage basin scheme outlining the six regional layouts in addition to TVA and the Mississippi River Commission. The latter is an existing organization under the Army Engineers which is left undisturbed so far as navigation and flood control in the Mississippi itself is concerned.

LETTING the Army Engineers hold on to what was the heart of the former Norris plan to regionalize the entire Mississippi valley was quite a concession. The Nebraskan has frequently expressed himself as feeling the engineers had not always played ball, according to his ideas, when they were in charge at Muscle Shoals. However, the MRC is hedged in by four regional authorities, two on each side of the Mississippi and, if the ultimate aim of the proposed legislation should be reached, the Corps of Engineers would have little or nothing to do with any tributary of the Mississippi.

It is quite a tribute to the Army Engineers that their activities in the Mississippi river, even limited in jurisdiction as they are, should be left untouched. The President suggested that this course be taken and both bills followed the idea. Tennessee Valley Authority is the only other existing

agency that is so treated and TVA would, under the Norris bill, be enlarged to include the Cumberland and take on added powers and independence.

Under the Mansfield bill, the President might find it possible to reshuffle the personnel problem and separate the power operations of TVA from the planning and purely social objectives. The Federal Power Commission, with the Mansfield theory in effect, would become the rate-making or reviewing authority for TVA as well as for all other Federal power operations; but Senator Norris would permit each of his conservation agencies to exercise independent jurisdiction on power.

PRESENT statutes conferring specified duties and responsibilities on Federal agencies with respect to activities outlined in the regional bills are not marked for repeal. Yet, specifically and within the discretion of a President, not necessarily Mr. Roosevelt but possibly a stand-patter or one more liberally minded, any public works or supervision could be transferred to a regional agency. Outside of the Mississippi river, all river and harbor, navigation, and flood control work could be lifted from the Army Engineers, the operation of navigation dams being the only exception.

States and localities, accustomed to dealing with Federal agencies at Washington or their subordinates in the field, would be required to treat with regional authorities in practically all matters affecting land and water utilization and conservation of other natural resources. In fact the drainage basin territorial jurisdiction instead of simplifying and expediting Federal-state relationships, would present new complications. For instance, the boundary lines of three different regional authorities would cut through nine states. Nineteen other states are partly within two regions.

In some of these twenty-eight states, the water, land, and other conservation problems are not serious, but nearly all at sometime or another would have occasion to deal with one or the other of the superauthorities.

The broad powers sought for the new agencies are such that there is scarcely any activity affecting water or shore usage or touching conservation that would not require consultation with or an application for approval by the appropriate regional set-up.

IN the East for instance, Virginia is principally in the Atlantic Seaboard Authority's area. TVA holds on to the southwestern part of the state, and

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the Great Lakes-Ohio Valley Authority takes over a slice along New river, which has its source in North Carolina. That state is subject to the same three regions.

Colorado in the West presents an interesting picture. Its territory is apportioned almost equally among three drainage basins. The Southwestern Authority takes that part embraced in the drainage area of the Colorado; the Arkansas outfit would have control of the southeastern part of the state, and the Missouri valley régime would be concerned with Colorado's northeastern area.

Wyoming is also in three regional areas. The Snake, a major tributary of the Columbia, has its source in western Wyoming so that area goes with the Columbia Valley Authority.

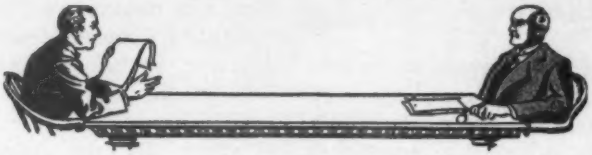
It is not difficult to imagine the contact problem state officials encounter in keeping themselves straight with one Federal agency, to say nothing of three regional set-ups, either ambitious to please or concerned with asserting their authority. And what of United States Senators and Representatives? Some of the latter will find their districts in two, perhaps three, Federal regions; for neither state nor congressional district lines were laid out according to drainage basins.

But that is not all. Once a regional authority makes its recommendations, except in certain instances where plenary powers are given under the Norris bill, the subject must go to Washington for review, especially if Federal funds are needed. The President may call in his Budget Director, the National Resources Committee, or any other agency at the national capital to assist him and presumably the same procedure that now obtains in securing Federal action would be maintained. There is no simplification there.

THE Mansfield bill is not so trustful of regional set-ups in dealing with the states as is Senator Norris, who would give a regional authority a veto power on interstate water usage compacts without reference to Washington. Representative Mansfield felt the President should have the final say on the recommendation of the appropriate authority. Both measures seek to relieve Congress of the present responsibility with relation to interstate compacts. In the East congressional approval is generally perfunctory when states agree, although the New England compact may have hard sledding because of the Federal power issue. In the arid West, where water is the lifeblood of every state, an interstate compact assumes importance that touches economic, agricultural, mineral, and political life as well as hydroelectric power.

No one has gone so far as to speculate on the location of the subcapitals where the proposed regional authorities would have their headquarters. The Atlantic Seaboard area, for instance, extending from Maine to the Florida Keys presents an interesting problem in this respect. The Army Engineers utilize three division engineers and half a score district offices to handle the rivers and harbors work in this territory, so it is not difficult to picture the spread of a new regional authority covering this area.

The Great Lakes-Ohio Valley area takes in territory from the Vermont-Canadian border southward, and westward through New York, Pennsyl-



Disturbing Effect of Regional Authorities

"THERE may be no end of the discussion of the constitutionality of what the regional authority bills propose to do. But there is one field in which the revolutionary measures will have a most disturbing effect . . . And that is in the existing spheres of Federal operations covering practically every phase of public works conservation . . . The limit to what may be done may be gauged only by the ability of the usually strongly entrenched factors in governmental fields to balk any encroachment on their present preserves."

vania, Maryland, West Virginia, Kentucky, Virginia, to the Mississippi. It covers all tributaries of the Great Lakes and the Ohio, except the Cumberland and Tennessee. Except for the Columbia valley in the Northwest, relatively compact, the suggested western areas cover wide open spaces.

WATER factors as a rule are common to the respective areas so far as conservation and flood control are concerned. In other respects there are conflicts, economic, agricultural, political, and of population, urban and rural, that present problems of administration, coördination, and coöperation that are difficult of reconciliation under any plan.

It may be that a President, Mr. Roosevelt or his successors, could command the services of a planning director and a power chief who could handle the multitudinous and conflicting problems that would come up. Perhaps a board of three for each region could be secured that could do the job better than existing agencies, if they were properly coördinated, but the gigantic character of the task, both from the selection of administrators and in the performance of their duties, should give occasion for pause.

Space does not permit enumeration of the requirements that would be imposed on state and local agencies with respect to matters over which the regional authorities would be given jurisdiction. Suffice at this point to say that there is scarcely an activity of a state, county, or municipality, affecting water or other conservation subjects, that would not require the consent of the appropriate superagency. The list of nonpublic activities that would be affected would be even more lengthy. General references to the scope, however, serve to call attention to the revolutionary extent to which it is proposed to extend Federal jurisdiction,

either directly or in an advisory or paternalistic capacity.

NEITHER is it essential at the moment to deal extensively with the innovation in judicial procedure proposed, for it is in this respect that Senator Norris in particular seeks to strike at his old "favorites" — the power companies. Federal courts would be given sole jurisdiction in matters affecting the activities of the regional authorities. The tribunals would be directed to require adequate indemnifying bonds to be executed by a plantiff covering all possible damages in the event of an unfavorable decision.

Had the United States Code included a similar provision in recent years, the effect on the coffers of power companies and possibly other litigants would be rather difficult to measure. While the judicial procedure sections are unusual, they are perhaps no more so than the requirement that any person accepting an appointment to a regional board shall subscribe in writing that he believes in the "feasibility and wisdom of the act."

Legal questions, together with others that raise constitutional issues involving infringements on the rights of states, Federal powers over nonnavigable streams, interstate labyrinths of varied character, is one for lawyers if they can accommodate, with reasonable certainty, former interpretations of the scope of Federal authority to the somewhat changing views of the Supreme Court of the United States. It is not for a layman to presume to suggest that the philosophy of the Norris bill, in its ramifications, infringes on established constitutional theories, whatever they may be, in the light of events of the past year.

EXCEPT for the Ashwander decision in the Alabama Power stockholders' case affecting the scope of Tennessee Valley Authority as to Wilson dam, the Supreme Court has not yet reached any of the power activities of the New Deal in which Senator Norris has had a leading hand in formulating. The trend of the circuit court of appeals for the fifth district in the Greenwood county (S. C.) Case, upholding the grant of public works funds for the construction of a publicly owned power plant, has been consistently in favor of the New Deal two to one and, while that does not necessarily reflect the final outcome in the higher tribunal, it is cited for what it may be worth as casting a shadow.

There may be no end of the discussion of the constitutionality of what the regional authority bills propose to do. But there is one field in which the revolutionary measures will have a most disturbing effect.

And that is in the existing spheres of Federal operations covering practically every phase of public works conservation, not only of natural resources but also of health, life, and the pursuit of happiness—certainly the peace of mind of the army of Federal officials and employees that is acutely disturbed by what may happen if Federal conservation and public works operations are "TVA-ized."

The concluding article on this subject will appear in the next issue of PUBLIC UTILITIES FORTNIGHTLY.

The Danger of a Strike That Hits the Public

Difference between private business and business of a public nature

When disgruntled workers in four cities in Michigan by an unauthorized strike held up vital public utility service, even so friendly a public official as Governor Murphy said that such a strike should never have been called and that it must never happen again.

By TULLY NETTLETON

When the journeyman tailors' union wants to let the public know that Joe Spivack, as an employer, is "unfair to organized labor," it posts a picket or two with sandwich-board signs in front of his shop in hope that potential customers will go elsewhere for their haberdashery. Can you imagine similar pickets walking up and down in front of the electric light office protesting the wage policy of your local power company?

Perhaps you can, for strikes even of public utility company employees have burst into the news of recent months. But the fact is that picketing the light company's business office would be a needless and inconsequential adjunct to a public utility strike. And thereby hangs a moral as to why a labor union faces an entirely different problem of public relations in attempting a strike in a public service company plant than in similar action against an ordinary manufacturing or distributive industry.

If workers imply that the employing tailor is keeping for himself a disproportionate share of the price John Jones pays for a suit of clothes, Jones nevertheless can walk past the picket at the door and buy the suit if he cares to pay the price. Or if he sympathizes with the journeymen and would like them to get a better slice of the amount he spends, he can walk on down the street to another shop and buy a suit made under conditions attested by the union label.

But in the case of a utility strike the consumer has no such choice. If the labor group is strong enough to tie up the generating plant or gas plant it has no need to hint to the consumer to withhold his patronage. The cus-

tomer will be simply unable to get gas or electricity from that plant or any other. He can't come down to the central office and carry gas or kilowatts home in a bucket nor can he get them over any other wires or pipes than those the resident company has strung into his home.

Moreover, his dependence on these vital utility services is almost unbelievable until one, by some emergency, has gone without it for even a few hours. Continuation of that service means not only light but also sometimes cooking fuel, refrigeration, heat (through electrically motored oil burners), radio reception and power for your washing machine, vacuum sweeper, clock, or, yes, now your razor. If the utility affected were water, transportation, or telephone, the disruption of modern urban American living would be hardly, if at all, less severe.

Consequently when a union calls a strike in a utility plant it simply says in effect to the consumer, "No soap! You'll just have to get along without our service until our employer comes to terms."

The family milk may sour, the householder bark his shins in the dark, the elevators in office buildings stop running, and work in factories cease for lack of power. But plain John Citizen can do nothing about it. Or can he?

Not long ago when power was cut off in a large part of New York city, not by strike or design but by an entirely unforeseen breakdown, there was political hell to pay—resolutions for investigations, and all that sort of thing.

When disgruntled workers in four cities of Michigan tied up service in an unauthorized strike last June, John L. Lewis of the C. I. O. negotiated far into the night with Wendell L. Willkie of Commonwealth and Southern to get an agreement through which he could herd them back to work. Homer Martin, president of the United Automobile Workers, under which the utility union very anomalously was organized, denounced the walkout as "instigated by stool pigeons for the purpose of creating unfavorable public opinion against the union."

There is no question but that he correctly appraised the public effect of the tie-up. So friendly a public official as Governor Frank Murphy said that such a strike "should never have been called" and "must never happen again."

The effect on the innocent bystander is like that of a general strike which paralyzes a whole community and has never failed to turn the public at large against the strikers even if it was friendly before. Or like that of a truckmen's strike if it should cut off supplies of food and milk.

A strike against a steel corporation involves products sufficiently removed from immediate general use that the public feels no inconvenience and may readily sympathize with the workers. In the case of a textile strike small shopkeepers in the mill towns may sometimes favor the employees' side because it promises larger payrolls to spend. But in a utility service labor leaders recognize that the reaction of the public to the pinch would be swift and wrathful.

What, then, is utility labor to do?

Are men to be debarred from the rights of organization and collective bargaining because they have chosen to devote themselves to one of those public services which seem particularly indispensable? Are they to be slaves to their jobs at wages and hours over which they have no voice simply because society cannot spare them the time necessary to thrash things out with a grasping or stubborn employer?

That doesn't seem fair either. So what then? The fact is that the strike is not the sole weapon of labor unionism. The rights of organization and of collective bargaining can exist and exist usefully apart from the resort to walkouts and picketings.

Organization can mean the possession of a unified, informed, and capable representation in presenting the case of labor either to employers or to the public. Collective bargaining can mean negotiation with employers through a designated representative with resort not to the strike but to some sort of more or less enforced arbitration as the club in the background.

AT a news conference in July reporters asked President Roosevelt about the right of employees of the Federal government to join labor unions. It is all right for them to join any union they want to, was in substance the President's reply—as many unions as they wish or none at all. But to strike? The answer of the Chief Executive was positive and unhesitating: No. There is no right to strike in the public service and the government cannot countenance any such attempt.

Is there then a right to strike—not in the public service—but in a service which has been recognized by the law for purposes of business regulation as "affected with public interest?"

Perhaps it is unnecessary to argue whether such a right exists, if labor leadership realizes that the exercise of such a prerogative would be dangerous and unwise policy. Yet even government workers are organized, thousands of them, and it would be unreasonable to expect public utility employees to forego all the benefits of organization. Even the public has no right to ask that a certain group of workers shall docilely go on serving it at an unfair or exploitative wage.

WHAT are the intermediate possibilities of union activity between mere passive paper organization on one side and damaging strikes on the other? To go back to the President's press conference for a parallel, Mr. Roosevelt described how union spokesmen may usefully present to adminis-

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trative officials certain considerations affecting working conditions or wage or hour standards where any leeway is permitted about these, although annual salary rates are generally fixed by act of Congress and never by contracts as in private industry. Occasionally, it is known — though the President skirted that point—a representative of a union of Federal employees may do a bit of effective lobbying.

Now a union of public utility employees can legitimately go farther than merely submitting grievances to the decision of management. It can reasonably request a written contract of wages and working conditions and the right of negotiating for yearly renewal or revision of this. It can carry on public relations work to acquaint consumers with conditions in the industry the same as do the companies.

BUT if the request for a working contract is refused or if the union and the company are unable to come to an agreement on its terms, is the only recourse a strike? Once it might have been, but a great deal of labor relations machinery has been developed since then. There are examples in the United States Railway Labor Board Act and the British Trades Disputes Act.

In either of these cases the government does not go so far as to attempt to impose compulsory arbitration in the sense of enforcing a verdict on either party. But it does set up such a gantlet of mediatory and investigative tribunals to be run that before either a strike or a lockout legally can be called the public has a chance to get a pretty good idea of which party is being the more unreasonable and can make relatively short work of it.

Even the apparent exception of the recent bus drivers' strike on the London Transport System does not disprove this thesis for that strike probably would not have been called if the men had not been sure at the start that public opinion was fairly sympathetic and that alternative means of transportation could prevent really intolerable inconvenience. As it was, the tie-up was relatively short.

AT any rate something in the nature of compulsory mediation—in cases where employees record a preference for collective bargaining—is clearly indicated as a result of unionization in the public utility industries. It has already come in the case of one public utility, the railroads, and will be demanded on more localized scale in the case of electricity, gas, water, and telephone if the experience of Saginaw valley in Michigan is oft repeated.

In fact the legal precedent for support of wage regulation has long since been set by the United States Supreme Court in the case of Wilson *v.* New, sustaining the Adamson Act which imposed the 8-hour day on railroads near the close of the World War. Recognizing that this was essentially wage legislation, the court held that labor as well as capital in a public service business is affected with a public interest giving the government a right to establish wages. In that instance direct congressional action was involved and in a direction to increase wages. If the power exists to raise wages it is worth remarking that the corresponding power must also exist to reduce wages if circumstances require it.

DIRECT legislative regulation of wages, like direct regulation of

Government and Indispensable Utility Service

"THE American Federation of Government Employees, affiliated with the American Federation of Labor, declares prominently in its constitution, 'We oppose and will not tolerate strikes against governmental authority.' If this be a true criterion of conduct for persons engaged directly in the public employ, it must be applicable in a measure to those engaged in furnishing the public with indispensable utilities."

utility rates, would plainly prove unsatisfactory because of lack of flexibility. The wage regulatory power—of state legislatures as well as of Congress—can, of course, be delegated, subject to proper limits and standards, to boards or commissions. The mediatory function of the Railway Labor Board has already been mentioned. To take a more local example, there is an arbitration board, set up by contract and without any delegation of state power, between the Boston Elevated Railway system (a private property publicly operated) and the union of its operating employees.

These are probably the patterns of what is to come. Arbitration boards will likely be set up by state authority if labor presses its point to the endangerment of utility service or if utility management neglects the claims of labor to the point of discontent.

Though the method represented in such boards constitutes probably the best practical procedure, even if it is a procedure not wholly free from imperfections or drawbacks, successful arbitration depends a great deal on the human equation, and it is not always easy to insulate the proceedings against political influence. But assuming the fairest kind of an award there would still be, then, two public tribunals determining financial conditions under which the public utilities must operate. For, of course, electric and gas and communication companies in most states are regulated as to rates and service and sometimes capital investment by state commissions.

IT is conceivable that the wages which an arbitrator would consider fair would add materially to the operating expenses above which the state regulatory commission is obliged to permit the utility to earn a reasonable return. The commission has some authority over the reasonableness of other items included in operating expense, as it has over rates of interest paid or of depreciation charged, but here would be one of the largest items set by another authority.

If the payroll costs which seemed reasonable to the arbitral board should appear distinctly unreasonable to the regulatory commission, would the latter nevertheless be obliged to accept

the situation and make its rates for the consumer accordingly? Wage awards on the Boston transit system, mentioned above, have even added to the deficit which taxpayers have had to make up in order to keep the guaranty to stockholders.

In Indianapolis, by an entirely unofficial agreement so far as any statutory recognition is concerned, the street railway company and its employees invoke as wage and hour umpires the same individuals who constitute the state public service commission but not in their official capacity.

In other instances the possible antagonizing of organized labor by a state public service commission is exemplified by a ruling of the South Carolina Public Service Commission in 1933 which ordered the Broad River Power Company to reduce its scale of wages and salaries, observing that these had not come down as had other earnings in the community during the preceding two years.

Possibly for the sake of unified policy and control, some states might designate their present public service commissions as the agencies for establishing utility wages as well as utility rates in event of a failure of conciliatory processes to obtain a labor agreement and in event of a threat of a strike. This probably would not be very welcome to labor, for although the essence of arbitration is the presence of an impartial representative of the public, the state regulatory commission is considered usually to represent the public not merely in the disinterested rôle of bystander but at least partly in the very interested rôle of consumer.

Nevertheless, the commission is an agency of the public; and if the public can properly say to capital that when invested in a protected public service monopoly it must be subject to a regulated return, then surely the public can say to labor in the relatively sheltered employment of public service corporations that it must be subject to some regulation of the right to strike.

It is true that upon a public utility corporation rests the responsibility of maintaining uninterrupted service, and this contemplates that the treatment of utility employees should always be such as to deserve their unfailing loyalty. At the same time the importance of utility service to the public is such that society cannot brook the cessation of that service as an instrument of industrial warfare.

An analyst of the so-called "new technique of revolution," as illustrated in the seizure of dictatorial authority in Russia and Italy, came to the conclusion that utility plants, controlling water, electricity, and communication, were more important nerve centers to be occupied in bringing a nation to its knees than the ordinary military objectives such as government buildings. In event of a labor movement with strongly political aspirations the public might be even more concerned than ever about public utility strikes.

One thesis of Harry Bridges, radical marine workers' and longshoremen's leader (now a prominent C. I. O. lieutenant), is understood to be that if all transportation workers of whatever kind can be welded into a compact, unified-acting body they can practically impose their terms on the rest of the nation. This might be true for a time.

It might be even more within the power of a nation-wide utility workers' union to paralyze momentarily national activity. Mr. Bridges' recent activity in organizing construction workers at Grand Coulee dam suggests such an extension of his original theory. But the repercussions from such an attempt would surely be terrific and the public would be found not without political and other means of defending itself.

A SITUATION of mutual embarrassment has been growing up for adherents of government ownership in utilities and devotees of aggressive labor organization, many of whom formerly cherished both loyalties in the same breast. The contest was brought directly home when representatives of the United Electrical and Radio Workers, affiliated with the C. I. O., recently signed up a large number of members among operating employees of the Tennessee Valley Authority. These were mostly not civil service workers, yet their organization raises several questions.

In working for TVA are they working for the government or not? If the TVA is merely another power corporation, is there a right to strike against it if necessary? And is it consistent with the dignity of a quasi governmental agency to bargain with unions of its employees and make contracts on wages and working conditions? Similar questions on a local scale may be foreseen if they have not been encountered—and perhaps in some instances solved—in municipally owned utilities.

But the point to be remembered is that labor may not always find government an agreeable taskmaster, and recognition of this fact has already tempered labor enthusiasm for public ownership under some circumstances. Organized labor, for instance, drew back suddenly from the Plumb plan for government operation of the railroads after the war when it occurred to someone that a striking engineman might be indicted for treason or kept in his cab at the point of a bayonet.

THE position of labor under extensive government ownership may swing in either of two directions. Under an authoritarian government as in Germany, free union organization may be blotted out and wages and hours and working conditions be imposed simply by official edict. Under a weak democratic government, as in France, the number of government functionaries may become so large that by concerted political influence they can mulct the National Treasury, and the result is

¶ "AT *a news conference in July reporters asked President Roosevelt about the right of employees of the Federal government to join labor unions. It is all right for them to join any union they want to, was in substance the President's reply—as many unions as they wish or none at all. But to strike? The answer of the Chief Executive was positive and unhesitating: No. There is no right to strike in the public service and the government cannot countenance any such attempt.*"

high costs and poor service for everyone.

Will labor sentiment and official or political sentiment in the United States be able to steer a more restrained and judicious middle course than either of these? With temperateness and coolheadedness it should be possible, whether the employer is a governmental corporation or a private one performing a public service.

The American Federation of Government Employees, affiliated with the American Federation of Labor, declares prominently in its constitution, "We oppose and will not tolerate strikes against governmental authority." If this be a true criterion of conduct for persons engaged directly in the public employ, it must be applicable in a measure to those engaged in furnishing the public with indispensable utilities. Hence both labor unions and utility corporations will do well to acknowledge and accept the responsibility of arriving at and maintaining fair working conditions by entirely peaceful and reasonable means, assuring an uninterrupted flow of service during negotiation and adjustment.

The Electric Industry As a Coal Consumer

It is obvious . . . to any student of the electric industry that there is a necessary and economical relationship between the generation of electricity by water power and by fuels, which has been maintained over a long period of years and is not likely to be greatly disturbed by the passage of this or any other legislation. It is significant that, over a period of twenty years, beginning with 1917, the electrical industry has gradually increased its share of the consumption of coal from 6-1/10 per cent of the total coal consumed in the United States in 1917 to a maximum of 9-9/10 per cent reached in 1936. This expansion in the use of coal has occurred in spite of the very large improvements that have been made in the efficiency of steam plants during that period, from approximately 3 pounds of coal per kilowatt hour in 1917 to less than 1.5 pounds in 1936. These figures indicate that the electric industry has been, and in all probability will continue to be, a dependable consumer of bituminous coal for years to come.

—Clyde L. Seavey,
Vice Chairman, Federal Power Commission.

Speaking of Holding Companies

Uncle Sam, the biggest operator of all, now controls the economic destinies of a considerable portion of American business.

By CHARLES MORRIS MILLS

TODAY, the assets of corporations held directly or indirectly by the Federal government amount to more that $22,000,000,000. While the debate ran high during recent years about the functions, rights, prerogatives, and limitations of holding companies, Washington itself was carrying on the most widespread activities of this character. In the old days, the emphasis used to be placed wholly upon the government investigation of business. Now, the surprising fact is that the Federal government *is not only in business but has not followed the same rules and regulations applied to private enterprise.* The attack upon holding companies especially in the public utility field has been carried along on one side; the creation of vast government holding corporations has occurred on the other. The left hand has not known what the right hand has been doing.

During the present administration, there has been depicted the pyramiding of operating companies under the domination of an over-all financial organization usually known as a holding company, especially in the public utility field. Taking one or two examples of highly technical and involved financing which unquestionably portrayed flagrant violations of common honesty and protection to stockholders, the public has been gradually led to believe that *all* holding companies were crooked and mismanaged. The Public Utility Act of 1935 was one result of this agitation. A holding company was described usually as an octopus squeezing the life-blood out of the assets and resources of subordinate companies. It was merely an instrument of power invented for the benefit of a few executive-pirates. Therefore, the public inferred that the holding companies must go—*all* were bad—even though 90 per cent of them might be performing perfectly useful and honest functions.

The worst part of the present situation is the fact that the money for these government enterprises is being siphoned off from areas of control and regulation through questionable methods. Taxpayers' money by the billions is being turned over to the Treasury,

which we will term A; then is assigned to a regular major department or subdepartment known as B; and finally passed along to a corporation, completely outside Federal control, known as C. The play is like a football game. A, who may be the quarter back receives the ball (or the Treasury appropriation), turns in a half-spinner and gives it to B (the government department), who, after faking an end run, forward passes the ball to C (the corporation). The only difference is that in the football game C is under the same rules as the rest of the players, while in government operations the C player or outside corporation is largely if not wholly immune from Federal regulation.

FOR the first 115 years of our national existence, the government usually fought shy of engaging in business and became a holding corporation only in limited measure. During the New Deal forty-two new corporations have been established, and the finance, control, and function of several other organizations have been changed toward corporate form. Today, Uncle Sam is not only engaged in banking and its multitudinous forms, but in the production of sugar and rum, railroad and international and domestic steamship operation, housing, of not only rural, but urban and suburban, people, production of spruce, and sales of manufactures by prison labor. In addition to these business corporations, there are eight eleemosynary institutions in the nation under Federal control. These are nonprofit, nonstock corporations managed by a board of trustees usually selected by the President, and approved by the Senate.

In 1781, the Bank of North America was chartered by the Congress of the Confederation. Later about one-fifth of the stock of both the First and Second Banks of the United States was held by the United States government. Throughout the next hundred years the Federal government seldom resorted to the corporate device as a means of carrying on its business activities. Some eleemosynary institutions were run on this basis; like the Smithsonian Institute, The Freedman's Hospital, St. Elizabeth's Hospital, and Howard University. Not until 1904 did the Federal government enter its now widely established rôle as a holding company to engage in commerce. In that year, our government bought the stock of the Panama railroad incidental to the future operation of the canal. In 1913, the Federal Reserve Board was set up with its twelve regional banks, but these operated without stock control, which is entirely different from the situation today, when there is centralized domination of our banking policies. Then in 1916 came the Federal Land System with twelve regional banks, each of which the Federal government controlled through stock ownership. These banks performed a most useful function not carried on by any other activities of the government. We may say, therefore, that the government, prior to the World War, had entered the rôle of a holding corporation in a most limited way.

THE exigencies of the World War forced the government to widespread use of the corporate device. The more prominent corporations included the Emergency Fleet Corporation,

United States Grain Corporation, War Finance Corporation, United States Housing Corporation, United States Sugar Equalization Board, United State Spruce Production Corporation, and the War Trade Board of the Russian Bureau. These were created in several different ways—the War Finance Corporation was established directly by the Federal government, while others took state charters like sugar and other corporations set up under Delaware laws, and the Spruce Production Corporation in the state of Washington. Some of these agencies, still in the process of liquidation nineteen years after the war, are a living example of the longevity of government boards. Others, like the Emergency Fleet Corporation, have been absorbed into other parts of the government.

From the close of the World War until the advent of the present administration, there were few new corporations established by the government. There were 12 intermediate credit banks founded in 1923. The Inland Waterways Corporation was set up in 1924 as a gathering company for various war-time agencies, and in 1932 the Reconstruction Finance Corporation was created. The latter at that time, however, was purely a loan institution, and the government did not purchase its stock—an entirely different corporation from the stock-controlled agency of today.

DURING the era of the New Deal, in addition to the government corporations actually created, others had their functions shifted from a non-government to a government basis, such as the control of the Federal Reserve system. Some corporations were established directly by an Act of Congress, like the Home Owners' Loan Corporation and the Federal Deposit Insurance Corporation. Others were set up under various state laws in a fairly clean-cut manner like the Commodity Credit Corporation. Others sprang into being without any known authorization by Congress, like the Public Works Housing Corporation and the Public Works Emergency Leasing Corporation chartered under the broad wings of the state of Delaware. The Comptroller General declared the latter agency was illegally established. Of the 42 corporations controlled by Uncle Sam, 30 are under Federal statute, 4 in the District of Columbia, 5 in Delaware, one each in Maryland, Tennessee, and the Virgin Islands. Four corporations have surrendered their charters.

The corporations may be grouped as follows:

Reconstruction Finance Corporation and its subsidiaries.

¶ "FOR *the first 115 years of our national existence, the government usually fought shy of engaging in business and became a holding corporation only in limited measure. During the New Deal forty-two new corporations have been established, and the finance, control, and function of several other organizations have been changed toward corporate form.*"

Federal Home Loan Bank Board System
Farm Credit Administration
Federal Reserve System
Tennessee Valley Authority
Public Works Emergency Housing Corporation and Public Works Emergency Leasing Corporation (under PWA and both liquidated)
Transportation: The Panama Railroad, The Inland Waterways Corporation, and the Merchant Fleet Corporation.

In addition, all of the following have been created since the advent of the New Deal:

Federal Deposit Insurance Corporation
Federal Subsidence Homesteads Corporation (in liquidation)
Federal Surplus Commodities Corporation
Virgin Islands Company
Federal Prison Industries, Incorporated.

THE total assets of corporations *wholly* controlled by the United States are more than $8,000,000,000, and more than $14,000,000,000 in corporations over which the United States exercises principal control. In addition to the corporations already discussed, Uncle Sam has participation and control in more than 7,000 corporations. The RFC has investments in 5,671 banks and trust companies, and the RFC and PWA have authorized 21,784 loans to borrowers.

These include almost every form of loan imaginable, including among others, railroads (72), insurance companies (132), fisheries, live-stock breeders, mining corporations. The Treasury and HOLC have participated financially in 750 Federal Savings and Loan Associations and the HOLC in 37 state-chartered savings and loan associations. The Production Credit Corporation has holdings in 550 associations. The RFC has many loans to newspapers and thus indirectly some control over the freedom of the press.

Federal corporations include those organized to execute some operating service, such as the Tennessee Valley Authority and the Reconstruction Finance Corporation which are fully financed by the government; or those supported jointly by public and private means, such as the Federal Savings and Loan Associations.

THERE is no comparison possible between the ordinary corporation with the hybrid controlled by the government. Stocks and bonds mean one thing in a private enterprise and something entirely different in a hothouse government corporation. All stock, for example, of the RFC was subscribed by the Treasury and raised through the flotation of government bonds. The RFC, in turn, has floated debentures to the tune of more than $4,000,000,000 guaranteed by the United States as to both principal and interest. All but $225,000,000 of these debentures are held in the Treasury. The directors of the corporation are chosen by the President with the advice and consent of the Senate. The stock is nonvoting and nondividend paying.

Or take the Federal Deposit Insurance Corporation which is managed by a directorate of three. The Treasury subscribed $150,000,000 and the Federal Reserve banks one-half of their surplus. The stock is "non" everything — nonvoting, noninterest bearing, and has no par value. Insured banks pay premiums to the FDIC. In

The Federal Superholding Company

". . . the Federal government has become a vast superholding company with numerous major subsidiary holding corporations. Through various devices Uncle Sam controls the economic destinies of a considerable portion of American business. There can be no restoration to normal prosperity, to orderly processes of law and order, to a balanced budget, as long as uncontrolled government companies continue to expand."

reality, the financing of hothouse corporations is mysteriously simple. Note the following from §4, Home Owners' Act of 1933:

> In order to enable the Secretary of the Treasury to make such payments (for the stock of the HOLC) when called, the Reconstruction Finance Corporation is authorized and directed to allocate and make available to the Secretary of the Treasury the sum of $200,000,000, or so much thereof as may be necessary, and for such purpose the amount of notes, bonds, and debentures, or other such obligations which the RFC is authorized and empowered under §9 of the RFC Act, as amended, to have outstanding at any one time, is hereby increased by such amounts as may be necessary.

Which means the RFC is authorized to loan the Secretary of the Treasury money which must be raised in the open market by borrowing.

THE Tennessee Valley Authority also offers a fertile field. Its type of organization closely follows that of an eleemosynary institution, but its functions are like those of a municipal corporation.

In some instances, these organizations perform exactly the same functions as do other agencies already established in the government. The RFC carries on work similar to the PWA and the Rural Electrification Administration.

Why then have such fungus growths come into being? The answer is easy: The present administration has used the corporate device to escape the laws enacted by Congress for an honest and efficient government. The corporations once established are subject only to regulation by statute and without control by Congress. Once capital stock is voted and credit pledged by the United States, the restraining influence of the United States vanishes. Income is usually retained by the corporations and not turned back to the Treasury. As long as the capital exists there is no need to come before Congress for annual appropriations. Thus, there is an

escape from the barrage of criticism usually accompanying appropriation hearings or on the floor of Congress.

By the same token, government corporations are usually free from the administrative control exercised by the Bureau of the Budget. Some agencies, however, are subject to review as far as administrative expenses are concerned under executive orders (August 5, 1935, No. 7126 and August 19, 1935, No. 7160). The accounts are not subject to normal auditing methods. It is true that the executive order of January 3, 1934, No. 6549, calls for an audit by the Comptroller General, but this does not grant power to disallow expenditure as in the case of regular departments of the government. Nor can the Comptroller General prevent RFC and FERA from granting money to enterprises such as the Rural Rehabilitation Corporations which are financed through state emergency relief administrations. In 1935, when Mr. Harry Hopkins requested that the rehabilitation companies turn over their assets to the Resettlement Administration, there were refusals in some states, pointing to evidence of mismanagement.

STILL further the corporate device enables the selection of personnel apart from Civil Service regulations. In this way, vast political machines can be set up which use taxpayers' money without restriction. In similar fashion, these corporations are free from regulations covering purchases and contracts. Further, by reason of charter under state laws, these corporations are assured of a permanent existence, even though the statute under whose authority they were created may have expired. This can be aptly illustrated by the U. S. Housing Corporation and the U. S. Spruce Production Corporation which were created during the war but still live onward. Or take the proposed program of rural electrification which was created *temporarily* by the President on May 11, 1935. The plans for the next ten years call for the expenditure of $410,000,000, all of which is proposed to be returned to the U. S. Treasury.

Legally, these agencies are like other government bodies in being tax-free, but differ in the fact that they are subject to suit on practically the same ground as privately owned corporations.

Thus, the Federal government has become a vast superholding company with numerous major subsidiary holding corporations. Through various devices Uncle Sam controls the economic destinies of a considerable portion of American business. There can be no restoration to normal prosperity, to orderly processes of law and order, to a balanced budget, as long as uncontrolled government companies continue to expand.

Believe It or Not, He Was Waiting for a Street Car!

IT was an icy day and with grinding brakes the street car had passed over a stray cat, extinguishing all of its nine lives. "Was the cat on the track?" demanded a suspicious old lady of the motorman. "No, madam," was the reply, "we chased him up the alley and nailed him."

Keeping Up with Uncle Sam

By FRANCIS X. WELCH

WELL, the Supreme Court opened up business at its new stand on October 4th with a sharp docket increase. Docket cases stood at approximately 477 cases—more than 50 over the opening date last year. The stock market may be off and the general business picture somewhat foggy, but business certainly seems to be picking up with the high bench. Despite all this, however, things still look pretty Black around the Supreme Court.

The high judges are rather nervous and somewhat annoyed about the spotlight which the Black controversy has focused upon their gleaming white marble temple. It was uncomfortable enough when the court was in the process of considering all the important New Deal test cases. With the bulk of these out of the way, the older members looked forward with relish to a resumption of that dignified semi-oblivion that has generally surrounded the work of the court in past years.

Supreme Court justices, in other words, are not used to having newspaper photographers jump out from behind every pillar and post to pop flash bulbs in their faces. They do not like to have every word they say, every step they take, indeed every bit of food they put in their mouths scrutinized by the bloodhounds of the press.

The Black incident has revived this unwelcome glare of publicity. The spotlight, of course, will be centered on Justice Black, but the rest of the bench will squirm in the background. Every written opinion, every question from the bench, every smile, frown, or trifling incident will be picked up and examined to see if it has a Black angle. Small wonder that court attachés are complaining about some of the justices being grumpy.

FOR the utilities, this year's business of the Supreme Court, ending next June, may well turn out to be more critical than any season so far. It all depends on whether the Electric Bond & Share Case (testing the Holding Company Act) and the suit of the 19 utility companies against the TVA reach the high court for argument before the deadline next spring. At this writing it would seem that the holding company case has a little better than even chance to make the grade, while the TVA test case has probably a little less than even chance of making such progress.

Although both of these cases are about at an equal appellate stage (both being now before courts from which appeal may be made directly to the Supreme Court), there is a sharp difference in the mechanical work involved in the two cases. Federal District Judge Mack so restricted the issues in the holding company case that there is little for the U. S. Circuit Court to do but approve or disapprove Judge Mack's opinion to the general effect that the nonregistering Electric Bond & Share Company was crying before it was hurt. The statutory 3-judge court in Chattanooga, however, must pass anew upon the merits of the multiple suits against TVA operations, and from this vantage point it looks like a rather complicated trial.

Aside from the holding company and TVA cases, the judicial year 1937-38 should be an important one to the utility industries. First of all, there remains to be disposed of the rehearing surprisingly granted by the court on October 11th on the 4-4 tie by which the court, last June, disapproved the California commission's habit of fixing gas rates based on original cost. With Van Devanter supplanted by

Black the Washington observers scent a possible victory for original cost after all these years.

Next there are the two companion cases involving the validity of PWA financing of local electric plants. The Alabama Power Company and the Duke Power Company are the two complainants against some municipal power plants in Alabama and a hydro dam in Greenwood county, S. C., respectively. If the government wins these suits (and the odds are now in that direction), over 50 PWA power plant projects, all over the country, will be released from injunctions now tying up construction. The recent curtailment of PWA activity, however, indicates that no new flood of such local projects would result from the government's victory.

There are also several cases of lesser importance involving utility regulation now on the court's docket. In one instance (No. 90), a state commission objects to a lower court's decision that a trial court should have taken judicial notice of a rising trend in prices. In two other cases (No. 109 and No. 207) the power of cities in Michigan and Ohio, respectively, to fix utility rates is being challenged.

Two more cases (No. 13 and No. 313) relate to orders of the Texas commission in fixing natural gas rates: In one instance rates for domestic gas service are involved; in the other, rates for wholesale gas service.

Lower Federal courts also have pending several utility cases of more than passing importance, other than the holding company and TVA cases. There is the suit by the Federal Power Commission against the Appalachian Electric Power Company involving the FPC's authority to license a hydroelectric project on the nonnavigable New river in Virginia because of its alleged effect upon the navigability of the Kanawha river. This case is still in the district court.

Then there is the suit by the United States (on behalf of the Secretary of Interior) to restrain the city of San Francisco from disposing of Hetch Hetchy power to a private utility in alleged violation of the Federal Raker Act. Victory for the government in this one might well force San Francisco into the power distribution business. This case, likewise, is still in the district court.

Finally, there is before the U. S. Circuit Court in Philadelphia a suit by the subsidiaries of the Associated Gas & Electric System challenging the right of the Federal Power Commission to investigate certain intercorporate financial transactions between Pennsylvania affiliates of that system.

SPEAKING of the recent demise of PWA financing for municipal public works, the National Resources Committee's report on Urbanism released last month contains much food for thought for those who like to think of such broad whither-are-we-drifting topics as utility regulation and public ownership. The NRC report, among other recommendations about utility service (including public ownership for transportation and electric utilities), is in favor of a permanent Federal credit agency to make loans and grants to "chronically depressed" communities for desirable public works, including the "acquisition or construction of public utilities."

The PWA, it will be recalled, only loaned or granted money for construction of new public projects—never for the acquisition of ones already built. The idea was to make jobs. Furthermore, PWA grants were restricted to the actual labor factor involved. Finally, PWA activities were entirely covered under the heading of emergency. So it will be seen that this new permanent "credit agency" idea in the NRC report is going much farther than PWA ever did.

The regulatory implications of the Urbanism report are almost too unique, especially with respect to those metropolitan areas which "defy state lines." The general idea seems to be an omelette made out of state compacts, Federal control, and municipal merger. It's a safe bet, however, that when this dish comes out of the legislative oven (if it ever does) it won't taste very good to the state regulatory commissions.

Financial News and Comment

By OWEN ELY

New Offerings Successful despite Bad Markets

RECENT issues of utility bonds, offered "on schedule" despite erratic market conditions, were reported quite successful, which has encouraged further registrations with the SEC to conform with previous plans.

The fortnight ended October 9th included three important issues: $8,500,000 Ohio Edison first 4s of 1967 at 100½, $48,364,000 Central New York Power general 3¾s of 1962 at 99, and $18,000,000 Idaho Power Company first 3¼s of 1967 at 98¼. The latter issue, offered on a day following a sharp break in stocks, according to *The Times*, "found an eager investment public, with insurance companies, especially those in New England, heavy bidders for allotments."

Forthcoming October financing, according to the SEC calendar, includes the following: $13,000,000 North Boston Lighting Properties 3¼ per cent notes of 1947; $80,000,000 Consolidated Edison debentures (half maturing in 1952 and half in 1962); $6,000,000 St. Joseph Railway Light, Heat & Power first 4s of 1947 and $2,000,000 3 to 4 per cent notes; $57,000,000 Appalachian Electric Power first 3¼s of 1967 and $10,000,000 debenture 4s of 1952; $1,000,000 Kansas Pipe Line & Gas first "A" 5s of 1952, and $1,000,000 Greenwich Gas first 4s of 1956. (The two latter issues have been "held over" and have no definite offering dates.) About one-quarter of the huge Consolidated Edison issue will be "earmarked" to reimburse the company for capital expenditures.

High grade utility bonds, while generally lower than last spring, have held up very well as compared with other classes of securities. *The Wall Street Journal* comments as follows:

> While dealers are encouraged by the reception given issues which buyers regard as reasonably priced they have few illusions that, as one banker expressed it, the old days of 3¼s at 105 will return. . . .
>
> Typical of the price difference which exists now compared with mid-February when Treasury bills last sold at as low a rate as they did (October 4th) are the following corporate bond quotations, with February 16th and current prices indicated:
>
> | | *Feb. 16* | *Current* |
> |---|---|---|
> | A. T. & T. 3¼s | 99¾ | 99¾ |
> | Ohio Edison 3¾s | 99 | 96¾ |
> | Union Oil 3½s | 112½ | 106¼ |
> | Consumers Power 3¼s | 101¼ | 100 |
> | Great Northern 3¾s | 95 | 89¼ |
> | Koppers Co. 4s | 102½ | 101½ |
>
> The relative stability of prime corporate issues in the recent market unsettlement has been the most impressive factor in the picture. Time and again when other bonds were selling off as much as several points, top-flight corporates, like Treasuries, gave ground only in fractions or else remained at their old levels. This was largely because bonds of this type, held mainly in the portfolios of institutions, were not pressed for sale as were convertibles and lower grade corporates of other type.

Commonwealth Edison Plans Conversion Feature for New Bonds

THUS far in their refunding programs the utility companies have made little use of the conversion privilege to "sweeten" their offerings. The first important convertible issue of recent years is contemplated by Commonwealth Edison in its plan for eliminating the funded debt, preferred stock, and minority interest of three subsidiaries.

The company expects to issue about $85,729,000 convertible debentures, to be offered first to stockholders. They will be convertible at a price of $25 a share. The stock closed at $27.25 the day before the announcement was made and subsequently declined to 25⅛. The offering will not be made until after the plan for exchanging the company's stock for shares of the three subsidiaries has been completed, and that will be November 15th at the earliest.

Fortunately Commonwealth Edison is not listed on the New York Stock Exchange. The exchange requires that subscription books on new securities offered existing security holders shall remain open at least twenty days, which makes the underwriting of such offerings rather precarious during periods of drastic decline such as recently encountered. Thus the underwriters' experience with the recent Bethlehem Steel convertible debentures was not encouraging. It has not been indicated as yet, however, that Commonwealth will have its offering underwritten. However, even if there is some further decline in the price of the common stock, the conversion privilege would doubtless remain attractive.

A number of railroad and industrial convertible issues have appeared this year, including those of New York Central, Pennsylvania, Allis-Chalmers, etc. The device may be used more widely by utility companies when "new capital" financing is sought on a larger scale—possibly in 1938.

SEC to Push "Death Sentence" after January 1st

C. Roy Smith, now in charge of the Securities and Exchange Commission's utilities division, has disclosed that he is already preparing rules for enforcement of the "death sentence." While this section of the Public Utility Holding Company Act, which directs the commission to simplify holding company systems, goes into effect January 1st, Mr. Smith has indicated that there may be a delay due to the constitutionality test now pending in the Circuit Court of Appeals.

The SEC recently issued additional rulings detailing certain interpretation of the act. Companies subject to the jurisdiction of the Interstate Commerce Commission were granted certain exemptions, and various types of exempt security transactions were defined.

Interborough-Manhattan "Feud" to End?

Mayor LaGuardia has requested Comptroller Taylor to start proceedings designed to give New York city title, through foreclosure of tax liens, to the property of the Manhattan Railway Company. Taxes and accrued interest totaled $6,985,595 as of October 1, 1937. The comptroller has indicated that he would consult with city law officers before proceeding. Charles Franklin, counsel for the Manhattan Railway Company, suggested that the city's move would be fought in the courts if necessary. He declared that payment of taxes would have involved default on Manhattan first mortgage bonds, resulting in loss of control by the Interborough and end of the joint 5-cent fare. He also stated that the back taxes were far less than the amount due the Manhattan from the city in connection with condemnation awards for demolition of certain elevated structures.

Ernest J. Bigelow, who recently organized a proxy committee for reorganization of the Interborough Rapid Transit Company, has been elected chairman of the board, replacing Frank Hedley, who continues as president and general manager. Eight other members of the Bigelow group were placed on the directorate, which will now endeavor to end the "feud" with the Manhattan Railway Company and wind up the receivership. However, the new set-up must be approved by formal vote of the stockholders October 22nd. At present the new group controls about 130,000 shares—175,001 being a quorum.

The Seabury-Berle traction unification plan, rejected by the transit commission last spring, is playing a minor rôle in the New York city political campaign now under way. The Citizens Union sent a questionnaire to candidates for legislative seats, seeking removal of the transit commission which, it is asserted, costs the city $1,000,000 a year and has proved a serious obstacle in the way of unification. The commission, in rebuttal, holds that the plan would have given present security holders effective control of city-owned transit lines for at least seventy-five years on terms onerous to the public.

Experts Disagree on Power Shortage

EDITORIAL comment in the *Electrical World* and in *Power* (both published by McGraw-Hill) differs on the question of a possible power shortage. An editorial in the *Electrical World* of August 14th, under the heading, "No Power Shortage," contained the following:

> Is a power shortage imminent? . . . Increasing loads constitute no new problem for the light and power industry. They are the normal condition. Since 1902 the output has increased more than forty-fold, and construction has consistently anticipated the rising demand. That process of anticipatory building is going on now. Since 1935 total new generating power installed and on order has totaled approximately 1,600,000 kilowatts. A detailed list published at the beginning of 1937 showed 1,273,000 kilowatts under construction, to go into operation before the end of this year. Of that amount nonfederal construction accounted for more than 1,000,000 kilowatts. Meanwhile additional orders in large volume have been placed to meet requirements of the years just ahead.
>
> Studies made by *Electrical World* indicate that the industry as a whole is probably operating with a smaller margin of reserve capacity than before the depression, but it must be remembered that interconnection and improved reliability of service have tended to reduce the necessary amount of safe reserve in generators.

The editor of *Power*, in the mid-September issue, reached somewhat opposite conclusions, as shown below:

> The possibility of a "power shortage" in 1938 or '39 has reached the stage of newspaper discussion. . . . In an attempt to get to the brass tacks of the situation, *Power* has analyzed some dependable statistics. . . .
>
> For the period 1920-29, inclusive, "public-supply" capacity increased from 14.4 to 31.6 million kilowatts, an average yearly increase of 9.2 per cent. Yearly output increased from 43.4 to 97.4 billion kilowatt hours, an average yearly increase of 9.6 per cent.
>
> Let's pass over the disorganized period, 1930-35, start with the known facts for 1936, then work on into the unknown future. To do this, we shall make two assumptions: We shall assume that energy output for the next few years will increase 9.6 per cent per year, as it did from 1920 to '29. This means an average increase of 13.3 billion kilowatt hours per year. To handle this and climb back to the predepression average of one kilowatt per 3,000 kilowatt hours by 1941 requires 4.6 million new kilowatt hours each year—230 per cent of the 1926-29 yearly growth.
>
> But the 3,000 kilowatt hours is probably *too* safe. Right now we're getting by with a national average of nearly 3,500 kilowatt hours. Take that figure as the safe limit, and generating capacity must be installed at 150 per cent of the 1926-29 rate to keep up.
>
> The boiler situation would be eased a bit by the better steam rates of the new turbines. Knock off 10 per cent for this, and you have a conservative estimate of required boiler installations (steaming capacity) 35 per cent above the 1926-29 average. That's about the safest minimum after making all reasonable concessions.
>
> How about hydro? At the end of 1936, steam represented about 70 per cent of capacity and 64 per cent of annual output. Diesel is unlikely to become important in this field. It is also fairly safe to predict that hydro will not gain on steam during the 1937-41 period (or thereafter). . . .
>
> Industrial purchases are probably the most important unknown factor. We shall play safe by saying merely that the industrial demand for new power equipment, in the years just ahead, must substantially exceed that of the 1926-29 period. If this is correct, and if our estimates of minimum "public-supply" needs are within gunshot of the facts, the yearly demand for new boilers, turbines, etc., for all applications during 1937-41 will far exceed the yearly installations of the 1926-29 period.
>
> Are manufacturers equipped to handle this business? We do not yet know. . . . . It will be the part of caution for individual utilities and industrial units to place orders for capacity to be installed well in advance of immediate needs, if that is possible.

Improving Stockholders' Reports

CARMAN G. Blough, chief accountant of the SEC, in a recent address before the Comptroller's Institute of America, emphasized the need for "material improvement" in the annual reports of many corporations to their stockholders. According to Mr. Blough:

> Some companies have filed information of major significance with the Securities and Exchange Commission, where it is a matter of public record, but have omitted it from their published reports. . . . Although available to all, it must be examined in one of the commission's offices or a fee must be paid for obtaining photostatic copies.

Mr. Blough pointed to ways in which write-downs or write-offs of assets might distort subsequent operating statements, and the importance of itemizing and allocating to the proper accounting period noncash bookkeeping items such as depreciation, depletion, amortization, losses charged to reserves, transfers to and from reserves, etc. He also emphasized the need for consolidated financial statements for holding company systems. He criticized the tendency, however, to confuse stockholders with "a multiplicity of footnotes" in reports.

Two Abitibi Plans

ABITIBI Power & Paper Company's reorganization plan is now encountering opposition. Chairman Ripley of the original Bondholders' Committee in recent newspaper advertisements urged acceptance of the plan sponsored by the committee, which he claims has the support of important British and Dominion interests, including large insurance companies.

The Ripley report holds that, in view of the wide variations in earnings experienced by the newsprint industry in the past, future profits should not be counted upon in large amounts to provide for the proposed improvement program, part of which reflects deferred maintenance and part of which is mandatory under the agreement with the Ontario government.

A new committee for holders of the first mortgage 5s is headed by Sir Henry L. Drayton, former Finance Minister of Canada. In a letter to bondholders this committee holds:

> Whatever merit the Ripley plan may have had at the time it was conceived, the spectacular improvement in the earnings of the Abitibi Company in the past few months has so completely changed the position of the company that there now appears to be no reason why the bondholders should make the sacrifice involved in the plan. The chief criticism of the plan is that it entirely takes away from the bondholders their first mortgage position.

Sir Henry, while admitting that it is essential to rehabilitate the properties, feels that it is unnecessary to raise all the funds immediately, particularly as the lenders would obtain a prior lien. His own plan would, therefore, eliminate the $14,000,000 prior lien bonds proposed in the Ripley plan, and reduce the fixed interest-bearing bonds from $38,133,500 to $36,200,250. Under the new plan each $1,000 Abitibi bond would receive $750 in new first mortgage 20-year 5s, $475 in second mortgage convertible cumulative income bonds, and five common shares. It is estimated that with $50 a ton for newsprint in 1938 Abitibi may earn over $10,000,000, compared with $3,000,000 representing 5 per cent on bondholders' claims for principal and accrued interest.

Mexico's "New Deal" Hurts Utilities

A RECENT article in *The Annalist* describes Mexican utilities as at a "dead end, despite the boom in general business activities." American and Canadian capital has been largely used to develop the electric power and telephone services in Mexico, yet comparatively little is heard regarding utility conditions in that country. According

to *The Annalist*, American & Foreign Power derives 12 per cent of its gross income from Mexico, Standard Gas & Electric controls some half a dozen properties on the West Coast, International Telephone (together with Ericsson) operates the country's telephones, and San Antonio and Chicago interests own Chapala, serving a number of cities with electricity. The Canadian-owned Mexican Light & Power Company, the largest utility in Mexico, reported a sizable deficit in 1935.

Interest charges on Mexican investments are particularly heavy because much of the equipment was installed when the peso was two to the dollar, instead of 3.6 as at present. Labor costs are high because Mexico has the most advanced social legislation of any country except Russia. Moreover, operating interruptions have been frequent due to strikes in power plants in sympathy with strike movements in other industries or due to troubles between rival labor organizations. Electric rates in Mexico City are lower than in any city in the United States (with one or two exceptions where municipally owned plants operate). Despite this fact, about one-quarter of the current is stolen by tampering with meters, etc.

As a result of these discouraging conditions the power companies are unable to expand existing facilities or even to supply the present demand for power. New legislation prevents the construction of thermal plants for reserve capacity during the dry season, when hydroelectric plants are likely to fail. Other laws prevent bringing new capital into the country, although "the Mexicanization of most foreign industry is taking place by the more subtle process of absorption without the international complications resulting from expropriation," according to *The Annalist*.

Thus, while Mexico is enjoying an unprecedented boom due to the influx of American tourists and the high wage policy of the government, utilities have not been allowed to share in this prosperity.

The telephone situation is also bad. International Telephone is withdrawing from the field by transferring its local investment to Ericsson (in which it has a one-third voting interest). The government has ordered International and Ericsson to unify the two operating systems through interconnection, but this will require some $500,000 and will decrease the number of subscribers. Ericsson has therefore applied for an increase in rates.

Corporate News

ELECTRIC Bond & Share has ended its argument before the U. S. Circuit Court in New York, in the appeal from a lower Federal court decision which held the registration provisions of the Utility Act constitutional. Robert H. Jackson, one of the assistant attorneys general of the United States, stated:

> Congress clearly has the right and the power to close the mails and other avenues of interstate commerce to those who refuse to obey its constitutional edict. It has the right to declare a public policy and prohibit the use of the mails to lotteries or for distribution of securities of companies who refuse to advance the information which investors ask but which, up to now, they have never been able to obtain.

He asserted that Electric Bond & Share, with a capital investment of a few million dollars, controls a $2,500,000,000 group of companies and that it floated 248 security issues for subsidiaries during the eleven years ended 1932, without Federal supervision. The implication was that state supervision of financing had been of little protection to investors.

Northern States Power Company plans to sell $21,815,000 stocks and bonds during 1938-42 to finance a construction program, and has already arranged for a $4,000,000 bank loan, according to President Pack's testimony before the SEC. Total expenditures will call for over $43,000,000 cash, but over half of this will be met through depreciation and amortization reserves. The bank loan will run for three years and cost about 2¼ per cent net.

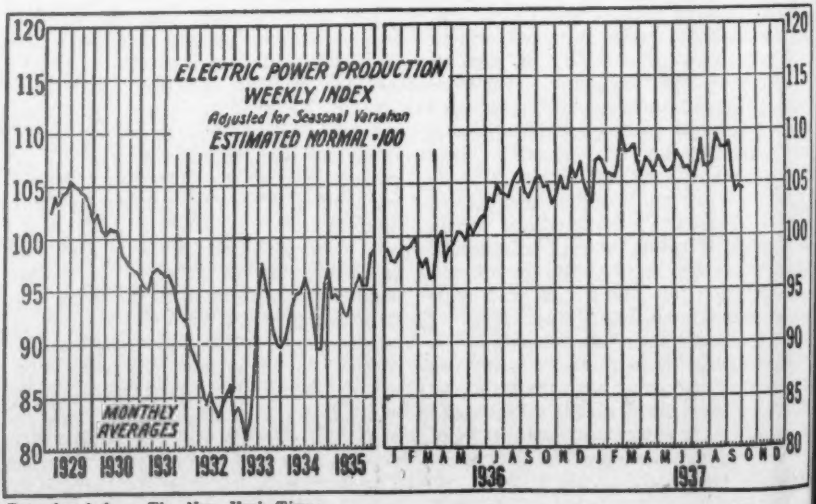
The Bell Telephone System continues to hang up new records. While the net gain of 99,400 telephones in September was well below last year's gain, it was the second best in the history of the system, exceeding that of September, 1929.

Columbia Gas & Electric Corporation has increased its semiannual dividend rate from 20 cents to 25 cents.

FEDERAL Judge George A. Welsh has rejected as overoptimistic and "unworkable" the revised reorganization plan of the Philadelphia Rapid Transit Company, now under 77B. He holds that system earnings of about $4,200,000 are insufficient to support the proposed capital structure of $133,000,000. Mayor Wilson immediately announced that he would ask the city counsel to start condemnation proceedings against the company so that the city may take over and operate the lines. The company, which in by-gone years operated successfully under the celebrated "Mitten Management," has been in receivership for six years, and underlying bondholders are reluctant to scale down their claims. Company employees, as a heritage of the Mitten plan, are substantial stockholders.

President Zimmermann of United Gas Improvement, in negotiating with the Philadelphia city council for a renewal of the lease of the city-owned gas plant, has agreed to accept a "trial rate" for 1938 provided any deficit at the end of the year be taken into account in setting the rate for the succeeding year. The possibility of introducing natural gas was mentioned as a means to reduce costs.

President Huff of Third Avenue Railway in the annual report for the year ended June 30th stated that the company is making "strenuous efforts" to economize and obtain tax reductions. While the net loss of $64,815 was only about half that of last year, this did not reflect the present cost burden. A wage increase granted at the end of the fiscal year will result in increased labor costs of about $750,000 a year; taxes will be perhaps $60,000 larger (due to the New York state 3 per cent tax on gross), while gasoline taxes may involve another $35,000 increase.



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OUT OF THE MAIL BAG

Can Commission Rate Control Be Exercised As a Governmental Function under Supreme Court Fixed Valuation Law?

INASMUCH as I originally joined in drafting the memorandum submitted by the Utility Consumers National Policy Committee to the Senate Judiciary Committee on the "Indirect Invalidation by the Supreme Court of State and National Policy in Public Utility and Railroad Regulation," I was particularly interested in Mr. Henry C. Spurr's recent article in reply to that statement. While I personally recognize that much of what Mr. Spurr said should receive consideration in a balanced and constructive study of public utility regulation, I feel that he did not meet the vital points of the memorandum. I should like, therefore, to make the following comments:

1. Besides public utility control by state commissions, the memorandum included specifically the 1920 national transportation act, which was not referred to by Mr. Spurr. It pointed out that since 1923 the Supreme Court majority destroyed this legislation and national railroad policy, not by direct findings of unconstitutionality, but indirectly by imposing unadministrable valuation methods.

2. As to state utility regulation, the committee did not hold that it was all fine before 1923, and all bad since. But prior to 1923 there was a clear *trend* to set up definite and workable administrative provisions, and this was stopped since 1923 by the new majority rulings on what constitutes "fair value"—based primarily upon reproduction cost appraisal and its paralyzing difficulties.[1] While I personally have felt that reconstruction might still be attainable, the consensus of lawyers is to the contrary. Here is the reason, for example, why the 1929 New York investigation of regulation failed to institute fundamental changes which I recommended and which were regarded desirable by practically the entire Legislative Committee.

3. To show that commission regulation has been essentially effective, Mr. Spurr presented a formidable array of commission orders which were said to be mostly *legislative* and *administrative* in character. But the great bulk had nothing to do with rates, and involved little or no conflict between public and private interests. The committee, of course, was concerned primarily with rate control, and its point is not the *number* of court contested cases of commission reversals. Its primary concern is, first, the *kind of orders* formulated to avoid judicial attack, and, second, the *mass instances* of no rate inquiries because of valuation methods. Here is the destructive effect of the court fixed rule of "fair value."

4. He presented also imposing rate reductions made in recent years as evidence that state regulation has been functioning quite well. The committee, of course, was aware that rates had been reduced, in some instances almost substantially. But: (a) the figures, which may be correct, are mostly based upon company *claims* and not statistically attested by commission technical staffs, and (b) the reductions have come principally through public *pressure* exterior to the governmental functioning of the commissions—due to mounting consumer discontent, to Washington utility action, to state political factors, particularly to the "yardsticks" and threats of public ownership, and to managerial realization that something had better be done and that lowering rates might be good business anyway. The relatively little that has been accomplished cannot be assigned materially to positive commission administration.

5. What the committee basically criticizes in the commission systems is the lack of precise rights, exact standards, and definite administration on the basis of facts. We cannot see how rate regulation can be made moderately satisfactory as a long-run method of dealing with fundamental matters of public interest, when regular administration is impossible and when the results depend upon various kinds of public pressure. This vast indefiniteness unfortunately has been "frozen in" by the majority Supreme Court holdings since 1923. The committee certainly would not, as implied, deprive utilities of all gross revenues. It merely insists that if private ownership and operation, with governmental regulation, is to be continued with reasonable regard for public objectives, there must be precise determination of rights and systematic administration.

6. As to whether recent rate reductions

[1] The procedure-blocking character of present valuation law was discussed by the writer in two recent articles in PUBLIC UTILITIES FORTNIGHTLY.

have been substantial is really not the point. Yet I think I know that at least electric and telephone rate decreases have been far from adequate on the basis of present attainable cost and realizable service volume. I can start with New York, and then go east, south, and west, and show the prevalence of grossly excessive and use-preventing schedules. But, to prove the fact in any instance *by due judicial rate process,* under the fair value rule, requires more money than is hardly ever available on the public side. And if proper preparation is made for consumers, as happens rarely, the commission is likely to carry the complex of court-fear into its findings—or go to unbelievable extremes to effect settlement rather than to make its own decision and risk judicial review.[3]

7. The need of definite administrative standards applies equally to public and private interests. During periods when technological advances, shifts in prices, and development of utilization work for reduction of unit cost of service, rates should be reduced systematically in accordance with such basic facts. Conversely, if rising prices and other changes produce increasing unit costs, rates should be raised on the basis of facts. Under the present system, rates cannot be properly reduced when justified, and cannot be increased when warranted. My personal realization that definite rights and exact administration are essential to effective control first came during the war years, when utilities could not get rate increases as vitally needed, and when their finances and services became consequently demoralized. Increases as well as reductions should be capable of exact and prompt measurement and determination. There should be no conflict of interest. Final orders should not involve unclear standards, absence of exact facts, mostly opinion evidence, and deadlocking judicial proceedings. *Administrative* instead of *judicial* rule is essential to regulation exercised as a governmental function.

8. Mr. Spurr challenges the correctness of the committee's position that any vital change in the law of valuation was decreed by the Supreme Court since 1923. Well, of course, the term "fair value" has continued and citation of Smyth *v.* Ames has been repeated, but the essence has been fundamentally changed. Certainly Mr. Justice Brandeis thought so in his dissenting opinion in Southwestern Bell Case, as have all the dissenting judges since on the valuation controversy. Before 1923, the issues centered in the *facts* of the individual cases. Since then they have been concerned with the *content of the valuation* concept. So it was that dissenting judges concurred in the results but disagreed with the legal reasoning of the majority. This difference was glaring in the St. Louis and O'Fallon Case in which the Interstate Commerce Commission would have been sustained under the prior view of "fair value" but in which national railroad policy was strangled under the new majority-made law. Personally, I had thought earlier that regulation could be put upon an administrable basis—still tried hard to think so in "Effective Regulation" published in 1925—but even as a confirmed optimist I can no longer rationalize manageable common sense out of the succession of majority rulings since 1923. Still, perhaps with more drubbing of the majority there may be reversal on valuation as on minimum wages and interstate commerce. Perhaps criticism and discussion may be worth while.

9. Mr. Spurr refers incidentally to the Massachusetts commission which nominally has conducted rate control on the basis of *investment* rather than "fair value" as prescribed since 1923. But, what the Massachusetts commission has done happens to illustrate admirably the prevailing difficulty. In the well-known Worcester Case, the commission based its ordered electric rate reduction upon investment. Its order was contested by the company; the Federal district court ruled against the commission on *valuation,* but sustained the order on *cost allocation.* Neither the commission nor the company appealed; the one had its order, and the other its valuation. And since then the commission has been duly cautious to avoid conflict with the new valuation law made by the court, as have inevitably all commissions. Through unadministrable valuation standards and methods, the companies have largely freed themselves of regulation so that they can do essentially what they please—subject to varieties of exterior pressures and to counter difficulties when rate increases are sought.

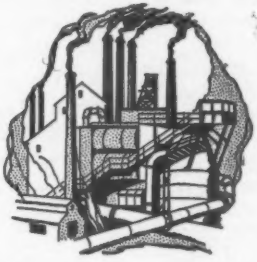
10. The article points to the ancient history when Mr. William Jennings Bryan contended for reproduction cost, in the famous case of Smyth *v.* Ames, decided in 1898, in which the "fair value" rule was first enunciated. But the committee is looking to the future—and has learned from the past. Furthermore, Mr. Bryan defended rates fixed directly by legislation prior to the state commission régime. This came soon after and was provided for the very purpose of establishing regular rate-making standards beyond realization in direct rate legislation. Hence, what was done under the earlier circumstances should not control later. And the point is that up to 1923 the Supreme Court had said essentially nothing that would preclude the establishment of an administrable system, while the decisions since practically make such realization impossible.

[3] If anyone feels that the above statement of wide evasion of basic regulation duty is mere generality, I can furnish plenty of concrete instances. Anyone who has come close to state commission regulation with open mind knows the realities outside of formal records. And I am not particularly criticizing the commissions under the circumstances of an unmanageable system.

11. The committee's opposition to "fair value" as proclaimed since 1923 is not based on its meaning intrinsically higher valuations for rate making than would be found under prudent investment. If it could be promptly and factually applied, it would produce now materially lower base figures than actual cost, partly because of lower prices but mostly because of technological advance. The objection is based (a) on its unadministrability, and (b) on the financial distortions produced with shifting prices and with the high percentage of fixed return securities in current financial structures. Except for these intrinsic difficulties, I can see no objection to fair value based on reproduction cost. But these difficulties are most vital, and they have destroyed the governmental exercise of regulation.

12. The fundamental point with which the committee is concerned is the establishment of definite measurements and regular administration. This is precluded, we believe, by the Supreme Court decisions since 1923. Unless there is reversal of the majority position, or side-stepping of what has been decided, we see little possibility of reformulating regulation so that commissions in *their governmental capacity* can readjust rates from time to time, upward or downward, without strangulation of procedure and without frustration of intrinsic purposes. This applies equally to protection of private interests as to attainment of public objectives in the organization, management, and control of public utilities.

—JOHN BAUER,
New York City.



Sell Your Own Boss and Get Paid for It

IN the sharp competition of modern business, new ideas in selling deserve recognition. To this end, utility sales executives might well turn over in their own minds a shrewd promotional plan now being tried out in the arc welding industry. Seems that not long ago arc welding men were grumpy about the fact that only a fraction of the construction work in this country which could be done more economically with arc welding actually employed that method. What was the matter? Poor salesmanship? Weak publicity or promotion? Or were the construction trades just too dumb to understand?

After considerable head scratching, certain arc welding men hit on what they believed was the real answer: The construction men were resisting salesmanship from the outside because of inertia or opposition to change from within their own organizations. They might not believe a salesman's brag that arc welding could save from 10 to 50 per cent in construction costs, but if one of their own engineers demonstrated it in his own report based on original research in his own plant, the management would just have to look into it.

The net result is the James F. Lincoln Arc Welding Foundation, a promotional group unique in character. The foundation raised $200,000 to be awarded to engineers, designers, or production men engaged in all lines of iron or steel construction for the best reports to their own bosses on what savings could be made through the use of arc welding. Copies of these reports are then eligible to be entered as papers with the foundation, and their authors may be awarded from $100 to $13,700, in addition to the strong probability of getting better jobs for showing their employers how to save money. The boss, of course, is delighted to find a new way to cut production expense, whereas the arc welding industry—well, after all, it was their idea in the first place.

What Others Think

The NRC Reports on Power Economy and "Urbanism"

THE National Resources Committee seems to be fast winning the respect of Washington observers as one of the lasting and important accomplishments of the New Deal. It is often bracketed nowadays with the Brookings Institution as an example of unbiased Washington economic research at its best.

Unlike the Brookings Institution, the National Resources Committee is an official advisory body appointed by the President to report to him on all matters dealing with the subject implied in its title. The NRC likewise differs from the Brookings Institution in that it addresses its research more towards the broader physical and technical phases of American industry and their social implications, as distinguished from the purely economical research of the Brookings group. However, like the Brookings Institution, the NRC is truly nonpartisan. This alone makes it a unique group, for it is one of the few official New Deal agencies which has had the courage to criticize, impliedly of course, some of the most cherished dreams of the Brain Trust. Furthermore, it seems that President Roosevelt is "taking it." Whether he likes it or is impressed by it is another matter.

The origin of the NRC goes back to the days of President Hoover. Readers will perhaps recall the Hoover Committee on Social Trends. Well, the NRC is carrying on the same broad technico-social research, and at least three of the same men are serving on the NRC who served with the old Hoover committee.

Perhaps the most surprising example of the independence of the NRC was contained in the recent report of its subcommittee on technological trends. The whole report was divided into a number of chapters dealing with various industries such as mining, communications, and, among other titles, a section on power (§V of Part III). This section bluntly questioned the general operating economy of hydroelectric-generating as compared with fuel-generating equipment.

COMPARING the investment in hydro projects with steam power, the report states:

> It must not be inferred, however, that the availability of a waterfall, where water runs to waste, if not used, means a cheap source of power. Water power lacks reliability, as it is affected by meteorological conditions, dry seasons, floods, ice in the water supply, and mechanical and electrical interferences with transmission lines connecting the power with distant markets. The water-power plant involves geographic restrictions, as waterfalls of importance are usually located far from power-consuming areas. However, water power is next in importance to steam in connection with large-scale power generation in stationary power plants.
>
> Water turbines are built in capacities up to 115,000 horsepower in a single unit, and to efficiencies of about 94 per cent. In fact, no prime mover transforms energy into useful power so efficiently as does the modern hydraulic turbine. However, while the hydraulic turbine is a most efficient prime mover, the water-power plant involves greater capital risks than is the case with fuel-burning plants. The fixed charges of a hydroelectric plant are usually high as compared with a steam-electric plant; the investment for dams, water storage, long-distance transmission lines to market, and emergency power reserves involve large investment costs. The annual distribution of rainfall and run-off cannot be controlled, and because of this, great extremes of high water and low water occur, making possible the utilization of only a portion of the potential power in a waterfall. Thus hydroelectric stations must use steam or internal-

combustion engine stations for emergencies, peak loads, low-water periods, and during floods. Through interconnection of hydro-electric plants and their interspersion with steam plants, the difference in time of seasonal flows of different drainage areas has been taken advantage of and the reliability of service improved.

Water-power plants are usually more expensive than steam plants for equally good service if steam or internal-combustion engine reserves are included in the cost estimates. Ordinarily hydroelectric power plants will involve a cost in excess of $150 per kilowatt capacity as compared with $75 to $125 for steam-electric plants.

The report went on to quote a technical paper by F. F. Fowle, well-known consulting electrical engineer of Chicago, who has stated that under ordinary conditions a steam plant will deliver current at the power plant bus bar at 4 mills per kilowatt hour as compared with 6.3 mills for a hydro plant. These figures included fixed charges and operating expenses, $85 per kilowatt installed as representative for a steam plant, and $250 for the hydro plant. Hydro-steam coördination, of course, would reduce unit costs.

THE report conceded certain operating advantages to hydro plants over steam plants, such as elasticity in starting up or shutting down on short notice and economical load fluctuation control through storage reservoirs. The report added that both types of equipment would probably be found to be most effectively used in combined complementary service. Accurate studies to determine the proper proportion of each were said to be needed. Meantime, the indiscriminate development of hydro sites was frowned upon.

Speaking of relative operating efficiency, the report flatly predicts that with our large coal reserves and the efficiency of steam-generating technique, steam power plants "will long remain a major factor in the production of mechanical power." It points out that the best steam-electric power plants are generating at present a kilowatt hour on less than a pound of coal as compared with an average of 3 1/3 pounds in 1918, 5 pounds in 1900, and 10 pounds in 1880.

On the general comparison of the cost of steam and hydro power, the report states:

> The cost of generating power is only a part of that which must be met by the consumer. A number of factors influence the actual cost, some of which have to do with the investment in the plant, others which relate to the utilization of the plant, and still others which are concerned with operating expenses. Interest, taxes, insurance, and provisions for depreciation and obsolescence influence the fixed charges on plant investment, as do the requirements for reserve capacity and the extent to which the plant is utilized, or plant-capacity factor. Mr. F. F. Fowle, in a paper which he presented before the Midwest Power Engineering Conference at Chicago on April 22, 1936, stated that "a complete electric utility of average size requires at present an investment in the order of $365 per kilowatt of installed capacity, or $520 per customer served. Approximately 38 per cent of this amount is invested in generating plants, 24 per cent in transmission lines, and 38 per cent in local distribution systems. . . . The annual charge for interest, taxes, insurance, and depreciation on the investment constituted in 1935 about 65 per cent of the whole cost of service." The 1935 investment of electric utility systems is given by Mr. Fowle as 13 billion dollars, of which 4.8 billion is in generating plants; 3 billion in transmission system; 4.7 billion in distribution; and 500 million in miscellaneous equipment.
>
> In considering the fixed charges for a stationary electric generating plant a number of factors must be considered, among which the following are of major importance:
>
> The power plant proper with its land site, buildings, and machinery. The cost of power plants per kilowatt vary with the type of prime mover, size, location, and design. In general, large steam generating stations may be built at a cost of $75 to $125 per kilowatt capacity. . . .

The cost of transmission, of course, depends upon the distance electricity must be transmitted, the amount to be transmitted, and the expense of the right of way, transformers, substations, feeders, etc. In the case of residential customers who must be supplied with current at low voltages and in small amounts, the report states that the transmission and distribution costs are often greater than the interest costs for the power station and equipment. Industrial

THEY'LL DO IT EVERY TIME

customers can be served under more economical conditions. Conceding the difficulty of calculating the actual cost per kilowatt for any special service, the report adds:

> Provisions for depreciation and obsolescence depend not only upon the actual life of the equipment but upon the useful life which often depends upon progress in the art. Thus in the case of certain power-producing machinery, improvements in design and construction have frequently resulted in conditions which made it practical to replace a prime mover in three to ten years with more modern equipment. Obsolescence, not merely wear, influences equipment replacement costs. Thus adequate allowance for depreciation and obsolescence should be considered in all calculations of power costs.
>
> Needs for reserve capacity depend upon the types of equipment and facilities available for meeting emergencies. Thus interconnection in the case of central electric generating stations has reduced the need for reserve capacity. Coöperation between industrial and utility plants is advantageous in reducing the necessity for spare units in either or both types of plants.

Taxes are an important item in the cost of power. In some fuel-burning plants taxes (local, state, and national) are approaching the cost of fuel. The Edison Electric Institute has reported that the ratio of taxes to operating income has increased from 3.44 per cent in 1902 to 9.46 in 1927 and to 14.1 per cent in 1934.

Fixed charges are practically independent of the load while operating expenses are definitely a function of the output. While superintendence, and to a lesser extent labor, cannot be varied as the load increases or decreases, other operating costs and particularly fuel depend upon the amount of power delivered. Thus in a hydraulic plant, which uses no fuel, the operating costs are practically the same whether the plant carries the maximum load or is standing idle; accordingly, any water which is allowed to pass over the spillway without producing power is a loss. The operating costs in the case of fuel-burning plants are a major item in the cost of power and the economies produced in these plants merit special consideration.

The report concludes its power study with a review of the growth of central station service, increase in use and de-

crease in cost of electric service in the United States since the beginning of the industry in 1882. Most of this statistical information is already familiar to students of utility economics.

However, while the NRC subcommittee report on technological trends pleased the utility executives (the Committee of Utility Executives reprinted excerpts of it in a special booklet), the NRC subcommittee report on "Urbanism" probably brought considerable frowns to their faces.

THIS report, entitled "Our Cities—Their Rôle in the National Economy," sets forth a number of conclusions about "chronically depressed communities" which trend towards strengthening the direct domination of Federal government over the cities and the corresponding weakening of the influence of state and county government. Particularly would this be true in those metropolitan areas which "defy state lines," such as New York city (New York and New Jersey), Washington (Maryland, Virginia, and the District of Columbia), and other border cities. Public utilities form an important part of the picture.

For instance, one of the eleven recommendations (No. 9) of the committee suggests the formation of special boards to deal with such borderline municipalities:

> The Congress should pass legislation giving advance consent and laying down the conditions under which there may be adopted interstate compacts enabling the several communities within the same metropolitan region, but in separate states, to deal jointly with the regional aspects of health, sanitation, industrial-waste regulation, the control of public utilities, planning, public safety and welfare, education, recreation, and other governmental functions of regional scope.

Unfortunately, the text of the report does not go into detail about the mechanics of such a proposed interstate municipal set-up, but it is quite likely that the Federal government would dominate the scene and the state commission would be pushed further away from the control of things, just as the British government manages to dominate the so-called "international government" of the city of Port Said which is situated in Egypt, and as the French government dominates the "international board" which runs the city of Tangier in Morocco.

Pushed to its extreme conclusion, it is not beyond the realm of possibility that were the NRC recommendation zealously adopted by the Congress, we would find the Federal finger in numerous state-line municipalities. It is surprising how many cities fall into this category. The NRC report contains a map of borderline metropolitan areas which may startle readers. Even cities now served by public utility companies operating entirely in intrastate commerce might wake up to find their regulatory control surrendered by state compact to some strange new board, just because a slight fraction of the economic area of these communities happens to spill over a state line.

MORE significant perhaps from the immediate viewpoint is the suggestion of a more or less permanent Federal loan and grant set-up contained in another of the report's recommendations (No. 4):

> The committee recommends the consideration of legislation *primarily* for periods of economic distress creating a Federal credit agency authorized to make loans and grants under adequate legislative safeguards to local governments for the purposes of public works construction (including housing), *acquisition or construction of public utilities*, land purchases, and similar outlays. On the other hand, in times of prosperity the committee believes that Federal expenditures in cities should be reduced to a minimum. (Italics ours.)

This would seem to be going much farther than the PWA did in financing local municipal utility plants. The PWA, it will be recalled, was for emergency purposes only, and President Roosevelt announced the end of its new activities recently, presumably because our emergency had passed. This new credit agency would be a permanent body to take up the slack of unemployment with public works whenever such slack appeared.

The PWA likewise restricted its loans and grants to new construction. It never loaned or granted money for the purchase of public properties already in existence. The whole idea of PWA, in other words, was to make jobs, not to pay off mortgages or interest on bonds. Just why the NRC's proposed credit agency should thus use Federal funds for "acquisition" of existing public utility systems for hard luck municipalities is not explained in the report. It would indicate simply a gesture in the direction of public ownership as a matter of principle, jobs or no jobs.

The report sketched the historical growth of the electric power industry, and while conceding that great strides have been taken, it observed that slow progress had been made in interconnection and coördination of facilities. The report stated in part:

> Even now there is a general lack of coördination of generating and transmission systems. Notwithstanding the unmistakable trend toward holding company control over large areas, the rivalry between holding companies too frequently has prevented desirable interconnections and coördination. Today the average loads on plant and equipment are still relatively low, and high rates are required to maintain idle capacity. The rates for electric energy are too high to encourage a larger average consumption per consumer. Where rates have been lowered, consumption has increased. In general, rates for residential service vary inversely with the size of the community. The rapid mechanization of industry and the electrification of primary power equipment have concentrated industrial demands for electric power in the larger industrial urban areas. Today two-thirds of the industrial demand for electric energy is concentrated in the cities of 25,000 and above.
>
> The generating and distributing of electric energy has come to be recognized as a public utility, particularly because of its monopolistic character. The financial control of the electric power industry in the United States has tended toward concentration into a relatively few major holding companies. In 1933, 12 companies controlled about 50 per cent of all electric power produced and served more than 50,000,000 people. In contrast, while 50 per cent of the electric light and power establishments in this country were municipally owned in 1932, municipal plants generated only about 5 per cent of the electric energy produced in that year.

Recognition of the problems in the power industry has brought with it efforts at public control which have taken the form of state utility acts and, in later years, of Federal measures. There is little uniformity among state laws regulating the production, transmission, and distribution of electric power. Only within the last two years has the Federal government entered the field of regulating the electric utility industry. Federal enterprises relating to electric utility regulation are the Public Utility Holding Company Act of 1935, the various hydroelectric projects now under construction, the Tennessee Valley Authority, the Rural Electrification Administration program, and the Power Division of the Public Works Administration.

PUBLIC ownership and Federal control of public utilities are among the objectives set forth in the NRC report. Transportation and electric utilities are first on the agenda. Already, says the report, "utilities such as electricity are, under the stimulus of Federal loans, undergoing a revival of the movement toward municipal ownership." A study is recommended to "determine the feasibility of creating a unified Federal agency for the regulation of all forms of transport."

Just as certain Federal legislation, such as the Public Utility Act of 1935, was enacted on the alleged inadequacy of the states to deal with interstate situations, so it is now asserted that "the concrete facts of our urban and administrative life frequently defy state lines and local control." It follows, therefore, under this concept, that Federal intervention is necessary.

The NRC also recommends that "the appropriate Federal agency" (FPC?), coöperating with state authorities and private companies, should develop a plan for the coördination of all private and public generating, transmission, and distribution facilities.

Some observers thought that they detected in the speech made by President Roosevelt upon the occasion of his recent visit to the site of the Bonneville dam evidence that he was at least thinking along the same lines as the NRC urbanism committee report, if, indeed, his remarks about the unhealthy growth of

our large cities and the need for "decentralization" were not inspired by an advance reading of the report.

There are some, however, including state commissioners no doubt, who are wondering if the President's suggested remedy—a regional planning set-up (a la TVA) would prove to be a step toward decentralization or a step in the other direction. Certainly it would put direct domination of the cities by the Federal government (and the corresponding weakening of state government influence) upon even a stronger and more permanent basis than it has up to the present attained under the stress of emergency.

—A. K.

TECHNOLOGICAL TRENDS AND NATIONAL POLICY. Report by the National Resources Committee of July, 1937. Superintendent of Documents, Washington, D. C. 440 pp. Price $1.

OUR CITIES—THEIR RÔLE IN THE NATIONAL ECONOMY. Report of the Urbanism Committee to the National Resources Committee. June, 1937. Superintendent of Documents, Washington, D. C. 88 pp. Price 50 cents.

The Gas Industry's Viewpoint on Regulation and Taxation

AMONG the addresses made at the nineteenth annual convention of the American Gas Association, recently held in Cleveland, was a review of legislation and taxation problems of the gas industry by William A. Dougherty of New York. While Mr. Dougherty's paper purported to look to the recent past, there were a number of conclusions in it looking towards the future which deserve at least the passing attention of those interested in the continued welfare of that industry.

On the whole, Mr. Dougherty's prognosis is scarcely cheerful from the viewpoint of the industry's management or its investors. He stated:

> By nature I am an optimist, so when Secretary Poe asked me to speak about legislation and taxes I cheerfully assented. It was a pleasant day in June, Mr. Poe's well-known persuasiveness was in high form, and no reason for saying no seemed apparent. Now, after preparing this paper, I am a confirmed pessimist. No longer can I look at the future years with a grin. I see waves of taxes and legislation and regulation engulfing the natural gas industry, until scarcely a B.T.U. is left for the investor, all being divided between the tax collector in taxes, the consumer in lower rates, and the worker in higher wages.

In the first place, Mr. Dougherty expects that the Lea bill to regulate interstate gas operations will be passed at the next session of Congress. He said:

> The bill regulating the transportation and sale of natural gas in interstate commerce (H.R. 6586), sponsored by Congressman Lea of California, passed the House but failed to pass the Senate. During hearings on the bill before the House committee no opposition was voiced by the industry, except to point out that expense would be created all out of proportion to the benefits to be gained. No hearings were had by the Senate committee and not a single word of protest was expressed by anyone in the industry. In view of this lack of opposition, prompt passage of the bill ordinarily would be expected. What happened in the Senate justifies the conclusion that Section I of the bill is in error in declaring that "Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest."
>
> When the bill came up on the regular calendar in the Senate, a number of Senators objected to its consideration because of lack of information. One Senator said he had heard of no demand from his state for its passage, and felt it would interfere with local regulation of rates. Even Senator Wheeler, who cannot be classed as an admirer and sympathetic protagonist of the utility industry, said he had no personal interest in the bill.
>
> The chief proponent of the bill in the House hearings was the Cities Alliance, a group formed by John W. Smith, former mayor and now president of the common council in Detroit. This organization was formed for the specific purpose of obtaining lower natural gas rates for municipalities that were members. A membership fee,

St. Louis Daily Globe-Democrat

THE OLD COWBOY'S REVENGE

based on the number of meters, was charged, and a paid secretary and legislative agent employed. We may safely conclude that the activity of the Alliance was inspired by the officers rather than by the subscribing members. When the bill was in the House there was a Washington office of the Cities Alliance, and press releases were issued describing the broad attack to be made on the pipe-line barons. These gentlemen apparently made no effort to have the bill pass the Senate.

The mayor and a member of the council of the city of Cleveland appeared at the House hearings in favor of the bill. They also wanted lower rates. No one even faintly suggested that the fairness of the existing rates be inquired into. Lower rates was the object. They thought the Federal government might be successful in reducing gas rates, and we cannot blame them for thinking so when we recall the attitude of that government toward electric utilities. There is no real administration backing or

any widespread public demand for this law. When we consider the antipathy of the administration to the utilities industry, the very lack of any interest on its part in regulating natural gas pipe lines can only mean that there are no present-day evils needing correction. These thoughts are satisfying to one's mind, but probably the bill will pass next session.

ASSUMING passage of the Lea bill, Mr. Dougherty comments on the probable attitude of the FPC as follows:

Without going into any more detail about the law or its effect on the industry, we can be certain that the attitude of the Power Commission will be of the utmost importance. Full regulatory authority over the interstate natural gas business is conferred on that commission and the discretion which this commission will exercise is just as broad as other commissions exercise in regulating public utilities.

Of particular importance will be the attitude of the commission toward the sale of industrial gas. Except to those understanding the economics involved, the sale of gas at low prices in competition with oil and coal may seem highly discriminatory against domestic consumers. The successful sale of gas to industrial customers requires a broad business discretion and not regulatory principles. At the time this bill was under consideration by the House committee, I discussed this point with the solicitor of the Federal Power Commission, Hon. Dozier A. DeVane. He assured me that our fears respecting industrial gas were groundless, that the commission already had experience with dump sales of electricity by hydro plants, which were a comparable sale. His point was that to have effective regulation it must cover all types of sales for resale. The commission feels that frequently much good can result from authority to regulate even though not exercised.

The speaker reviewed other legislation which passed or failed to pass at the last session, including Senator Norris' "seven TVA" bill, the wages-and-hours bill, Senator Minton's *prima facie* original cost rate base bill, an omnibus public ownership bill for all natural resources, and Senator Bone's bill restricting Federal courts from issuing injunctions against local tax laws or ordinances. Only the last named of these has been enacted so far.

After commenting on other Federal and state legislation, Mr. Dougherty got around to the subject of taxes:

In all but four states some type of tax on gross revenues is levied, a form of tax that is more inequitable and unjust than a net income tax. It is a direct burden on every sale of gas, and you may have to pay it even though there is no net income left.

The administration takes great credit for its support of the needy and is proud of its billions spent for relief. But have you heard any paeans of praise sung for the utilities for their contribution to the support of that one-third of our population which is "ill-nourished, ill-clad, and ill-housed"? In the early days of the depression the states knew from whence to siphon the money. In Ohio for four years the utilities have contributed 2 per cent of their gross revenues for poor relief. In 1936 the gas companies in Ohio reporting to the American Gas Association showed gross revenues of $62,577,900, of which $61,097,900 represents natural gas revenues. One and one-quarter millions of dollars for poor relief in Ohio in that year from the gas industry!

CITING instances in New York, Ohio, and West Virginia, Mr. Dougherty found similar examples of heavy taxation imposed on the gas industry. He gave an explanation for the burden as follows:

We realize that taxation is an intensely practical subject. The first principle is to tax the source that can pay. The utility industry being a steady collector of revenue, there is a natural tendency to take out a bite as the money passes. We cannot move to another state where taxes are lower, but must stay and take it. We can't promptly add it on to the sales price as can other industries.

Then ease of collection and minimum of "squawking" rather than equitable distribution of the tax burden have great weight. Of course the source of the squawk means much. Witness the fact that general sales taxes were a last resort for revenue, too many voters being affected. There are many consumers of public utility services and possibly a thorough knowledge of the indirect taxes they are paying and the certain effect of those taxes upon rates might accomplish some reduction in tax spending. True it is that during a period of price increases utility rates lag. When the trend is the other way frequently the utility must impound revenues in excess of a newly fixed lower rate until a permanent rate has been established. The customers then get a refund. But when costs rise it may take two years to get rates up to reasonableness, during which time the investors and employees are the ones who suffer. Eventually the rate must include the tax cost, and this must be understood by the consumer.

Recently, hearings on the rates of the Brooklyn Union Gas Company were discontinued by the New York Public Service Commission, Chairman Maltbie stating there was no likelihood of a reduction in rates because the company was faced with increases in labor, material, and taxes.

Summing up, the speaker held out small hope of immediate results from opposition to tax burdens from within the industry itself. In the past such opposition has accomplished little, but he ventured the thought that by persistent education of gas consumers on the point of their own stake in high utility taxes, some response might be developed in time.

—M. M.

LEGISLATION AND TAXATION. Address by William A. Dougherty. Delivered before Nineteenth Annual Convention, American Gas Association, Cleveland, Ohio. September 27 to October 1, 1937.

The Necessity for Continuing Commission Regulation

THOSE of us who accept for granted the inevitability of continuous regulation over public utilities regardless of their ownership or operation may well wonder what the public ownership advocates are going to say when regulation catches up with municipal, state, and Federal utility projects. Maybe in a totalitarian state, such as the Soviet Union, it is possible to dispense with any independent authority to say yes and nay about public service operations by government agencies, but certainly in a confederated system such as the United States, the niceties of distinction between the three tiers of government—Federal, state, and municipal—almost demand supervisory boards.

Professor C. O. Ruggles of the Harvard School of Business Administration is one of those who apparently believes that public ownership champions who are so busy disparaging the effectiveness of state regulation of utilities and solemnly announcing its collapse and annihilation would be much better occupied if they busied themselves preparing the necks of their favorite projects for the yoke of regulation which is certain to be clamped on them some day. Professor Ruggles in his recent study on aspects of the organization, functioning, and financing of state utility commissions is very convincing about the necessity for state commission regulation for publicly owned and operated utility systems. He states in part:

The public should not imagine that a shift to public ownership and operation will relieve it of the task of working out a satisfactory program of utility regulation. A mayor with political ambitions may initiate a depreciation policy that will appear to make the operation of a municipal plan very successful during his administration. The most vital business problems of utilities are not solved by changing the form of ownership. Any fair test of the merits of either public or private ownership is dependent upon competent continuous regulation.

Professor Ruggles reviews the advent of state commission regulation as a substitution for older forms of regulation by franchises, charters, and legislation. From temporary boards created to settle particular utility disputes, permanent commissions developed at first with limited or advisory powers. Their regular regulatory jurisdiction first became plenary in 1907 and has been broadened and strengthened by statute ever since. The process is still going on.

THE bulk of Professor Ruggles' study is given over to a careful examination of the state commissions in practice. What kind of men are on them? What are their qualifications, salary, tenure, etc.? The findings are detailed but should constitute a valuable compilation to students of the technique of regulation.

On the suggestive side, Professor Ruggles favors the appointive rather than elective method of creating commissions, although he pays tribute to some excel-

lent work done by the elected commissioners. Regarding qualifications for office, he seems rather lukewarm towards technical requirements for eligibility. Such, he finds, seems to be the prevailing attitude in any event. After all, state commission staffs are generally supposed to provide the purely technical background.

The important part is to get generally qualified men with a high grade of intelligence, patience, tact, tolerance, and courage.

One phase of commission membership questioned by Professor Ruggles was the extent of the tendency of retiring commissioners to enter the employment of the utilities they formerly regulated. The actual record of the number of times this has happened appears hardly worthy of much concern, but the professor seems to be impressed by the principle of the thing at least. He finds, in brief, that although most statutes prohibit commissioners from having any pecuniary interest in utilities, they do not require any period of time to elapse after service on a commission before the commissioner is employed by a utility. The author feels that employment of excommissioners by utilities is just as important a matter of public interest as a commissioner's financial interest while in office.

Incidentally, he roundly condemns the deplorable tendency occasionally evidenced to make commissions either a political dumping ground for party hacks or a recognized stepping stone for younger politicians on the way up. He thinks a commission job should be a career, with sufficient salary and staff to make it attractive to able prospects.

—F. X. W.

ASPECTS OF THE ORGANIZATION, FUNCTIONS AND FINANCING OF STATE PUBLIC UTILITY COMMISSIONS. By C. O. Ruggles, Bureau of Business Research, Harvard Business School, Soldiers Field, Boston, Mass. $1.

Notes on Recent Publications

ASPECTS OF THE ORGANIZATION, FUNCTIONS AND FINANCING OF STATE PUBLIC UTILITY COMMISSIONS. By C. O. Ruggles. Bureau of Business Research, Harvard Business School, Soldiers Field, Boston, Mass. $1.

GENERAL SURVEY OF TAXICAB TRENDS IN THE MAJOR CITIES. *The Taxi Weekly.* September 8, 1937.

I WORK FOR A POWER COMPANY. By John Fort. *The Saturday Evening Post.* September 11, 1937.

MAN VERSUS FLOODS. By J. K. Finch. *Political Science Quarterly.* September, 1937.

PUBLIC EMPLOYEE UNIONS. By Arnold S. Zander and Abram Flaxer. *Public Management.* September, 1937.

Those concerned with utility operations may find of collateral interest these companion articles written by leading officials of competitive unions seeking the organization of employees of public governmental agencies. Mr. Zander is the president of the American Federation of State, County, and Municipal Employees (A. F. of L.), while Mr. Flaxer is the executive vice president of the State, County, and Municipal Workers of America (C.I.O.).

WHAT'S HAPPENING IN NEBRASKA? *Electric Light and Power.* September, 1937.

¶ *"To provide safe operation, adequate and continuous service under reasonable and nondiscriminatory rates, it is essential that every operator whether operating interstate or entirely within one state shall receive adequate revenue, and the rate for each transportation service performed must be high enough so that other service will not be burdened by unduly high rates to make up deficiencies in the carrier's revenue."*

—EDWY L. TAYLOR,
Member, Connecticut Public Utilities Commission.

The March of Events

Court to Reopen Original Cost Case

THE Supreme Court on October 11th granted a petition by the railroad commission of California to review the court's action on a gas rate case, involving the Pacific Gas and Electric Company, which was taken on the last day of the last term (June 1, 1937). At that time, the Supreme Court by a tie vote, 4-4, without opinion, affirmed the action of the lower Federal court, which reversed an order of the California commission reducing the utility's gas rates. (Lower court opinion reported in 13 P.U.R.[N.S.] 520.)

The principal question at issue was the avowed use of original cost estimates of property valuation by the California commission in fixing the utility's rate base. The action of the Supreme Court in granting a motion for rehearing was in itself quite unusual; and in view of the tie vote at the last term, there was speculation as to whether the recent addition of Mr. Justice Black to the court's membership in the place of Mr. Justice Van Devanter might have the effect of throwing the balance in favor of the California commission on the rehearing of the case.

The court also agreed to review two other cases of utility interest—one presenting the question of whether the Federal Communications Act of 1934 prohibits the use, as evidence, in criminal prosecutions, of contents of messages obtained by the tapping of telephone wires. The second review granted was a utility rate case which involves the question of whether trial courts should take judicial notice of price trends which may affect the rate base subsequent to the introduction of evidence.

The Supreme Court, at the same session, refused to disturb, in a case involving the TVA, a decision by the Georgia Federal Court which declined to allow the Georgia Power Company to withdraw its suit in the Federal district of that state because the company had joined with other power companies in a similar suit in a Federal court in Tennessee.

Bonneville Head Named

APPOINTMENT of James Delmage Ross, a member of the Securities and Exchange Commission, as administrator of the Bonneville hydroelectric project was announced on October 10th by Secretary of the Interior Ickes. The appointment created a second commissionership vacancy on the SEC, the other having arisen recently when James M. Landis resigned as chairman to become dean of the Harvard Law School.

Mr. Ross is well known as an engineer because of his work in the development of the Seattle city light department, of which he is superintendent.

Under the Bonneville legislation the administrator, acting under the Secretary of the Interior, is charged with the duty of administering the transmission and marketing of hydroelectric energy produced at the dam on the Columbia river near Portland, Ore. He also must prepare a rate schedule to provide the widest possible diversified use of the Bonneville current.

Special Session Will Consider Regional Planning

PRESIDENT Roosevelt on Columbus Day (October 12th) pointed the November 15th special session of Congress to the legislative battle front where Democratic majorities rebuffed him during the session closed last August.

Roosevelt in one of his "fireside chats" laid down for Congress an immediate domestic program weighted with crop control and legislation for minimum wages and maximum hours. His most urgent concern was the "lowest paid labor." He called for congressional action "right away."

The reaction of congressional leaders was not enthusiastic. Republicans generally asserted that no emergency exists. Ardent New Dealers expressed "full accord" with the President's action, but Democratic Senators who helped defeat the President's judicial reorganization bill commented reservedly, it was said.

President Roosevelt touched only briefly on foreign affairs but he warned that we cannot avoid war by ignoring it.

The President placed a "decent profit" for business among his objectives; and said the government does not seek to put individuals out of business. He charged that "whatever danger there may be to the property and profits of the many, if there be danger" comes from business restraints imposed by "private monopolies and financial oligarchies." These he promised to end.

He said his wage and hours program, by distributing jobs and shortening the work-day, should so increase consumption that production costs would decrease and industry would absorb "a considerable increase in labor costs"

without raising prices to the consumer.

Of special interest to students of utility regulation and those interested in conservation were the President's remarks to the effect that great public works projects, such as those he recently visited on the Columbia river, need a more businesslike system of planning and a greater foresight. The President said:

"That is why I recommended to the last session of the Congress the creation of seven planning regions, in which local people will originate and coördinate recommendations as to work of this kind to be done in their particular regions. The Congress will, of course, determine the projects to be selected within the budget limits."

Those concerned with the work of the so-called independent Federal commissions also followed with great interest the President's statement to the effect that he would press for action on his bill to reorganize the Federal administrative agencies so as to secure a greater measure of central administrative control.

REA Work Expanded

FEDERAL REA Administrator John M. Carmody on October 12th announced several organizational changes to speed up and consolidate REA's expanding activity in the construction of projects and the supervision of their operations.

Boyd Fisher, who has been director of the Development Division, was appointed director of a newly created Division of Operations Supervision. The Development Division, whose activities in connection with the initiation of projects have been shrinking as the demand for projects outran the limited funds available, will be known as the Examining Division. It will be headed by C. O. Falkenwald as acting director.

Melvin O. Swanson resigned as chief engineer. Ward B. Freeman, who has been chief of the Project Control Section, will act as coördinator of engineering activity. Mr. Swanson, it was said, will undertake for the administrator special research work relating to the engineering feasibility of projects. Mr. Freeman will direct the accelerating program of rural line construction.

In commenting on the changes Mr. Carmody said in part:

"We are in an expanding program. Between July 1st and September 17th we have approved $28,500,000 of construction contracts. This is more than the total of construction contracts approved in all of the last fiscal year.

"This building program is making terrific demands upon the whole engineering staff at headquarters and in the field. More than one hundred project engineers, employed by the borrowers, must have their work coödinated with the work of contractors, project superintendents and REA headquarters engineers. All this work must be speeded up in order that we may get every possible mile of line built before winter shuts down on us in some sections.

"Although we have already made great progress, we consider ourselves behind schedule in that we are not getting the lines up as fast as they can be erected and as we are determined that they shall be erected.

"As a result of plans in process for months, we now have in the field or in training for field work, an enlarged field engineering staff that will carry out in the field the spirit of coördination as it is being practiced in the various divisions here."

SEC Adds New Rule

THE Securities and Exchange Commission on October 5th announced the adoption of a new rule granting certain exemptions under the Holding Company Act to companies subject to the jurisdiction of the Interstate Commerce Commission. Also announced were amendments to three other rules.

The new rule, 3D-8, exempts subsidiaries of registered holding companies which are subject to the jurisdiction of the ICC and which are not electric or gas utility companies or holding companies from the provisions of the act with respect to transactions which have been approved by the ICC. The exemption from § 9 (a) (1) by this rule is limited to certain kinds of acquisitions.

An amendment to 9C-3 (9) by the addition of clause (F) extends the types of exempted acquisitions acquired by virtue of a reorganization (as defined by the rule) to include securities acquired incidentally to transactions exempted by Rule 3D-8 under certain circumstances.

Amendments to Rule 9C-3(5) and Rule 9C-3 (6) both deal with acquisitions of securities by way of dividend where the dividend is payable either in securities or in cash or other property at the election of the acquiring company. Such an acquisition is not within the scope of the exemption granted by Rule 9C-3 (5), as amended, but may fall within the exemption granted by Rule 9C-3(6), as amended, if the issuing company is either a majority-owned subsidiary or is not, immediately before or after the acquisition, an associate of the acquiring company.

The amendment to Rule 9C-3(6) also broadens in other respects the exemption as to acquisitions of securities of a company which was not, before or after the acquisition, an association company of the issuer.

The commission also announced the adoption of General Rule 5, which deals with nondisclosure of information obtained in the course of examination, studies, and investigations under certain sections of the act, except with the approval of the commission. Similar rules were previously adopted under the Securities Act of 1933 and the Securities Exchange Act of 1934.

Renew TVA Fight

CONTINUATION of the coal industry's fight against government power projects, with particular reference to the Tennessee Valley Authority, was urged recently in the annual report of the convention of the National Coal Association.

The report, prepared by Executive Secretary John D. Battle, said that "the TVA and other government hydro power projects, and other legislative proposals in the same category, have necessitated a continuing battle. The end is not yet in sight . . . We are battling now an attempt on the part of the administration to set up the TVA's 'seven sisters' to cover the entire country."

The "seven sisters" are the proposed seven hydro power districts in various sections of the country to develop available water power resources. With reference to these bills, the report said:

"These bills are to be vigorously pushed at the next session of Congress. They are more destructive to representative government than the TVA, although patterned after the TVA. It is evident that we must exert every possible resource to combat their enactment."

Alabama

Moves for TVA Power

CONTINUING efforts to bring TVA power to Tarrant, the city council adopted a resolution early this month authorizing issuance of bonds to the amount of $200,000 to finance an electric distribution system in the city.

The resolution authorized the issuance of 200, 4 per cent revenue bonds in the denomination of $1,000 each dated to mature from November 1, 1941, to November 1, 1964. The council further passed an ordinance fixing the rates for current and service. The ordinance set tentative rates for four classes of users, the standard residential rate, basic industrial rate, and the seasonal industrial rate. The minimum residential rate under the standard residential classification was set at 75 cents per month per meter.

Tarrant city voters authorized municipal power in an election about two years ago.

Loses Fight on REA

JUSTICE Daniel W. O'Donoghue of the Federal District Court at Washington, D. C., on October 7th denied the Alabama Power Company's petition for a temporary injunction restraining Rural Electrification Administration loans to the Cherokee County Electric Membership Corporation of northern Alabama.

Dean Acheson, attorney for the power company, announced that he would appeal to the U. S. Court of Appeals. The company contended that the REA had violated the law by interfering with its business. Mr. Acheson said the electrification act was intended to provide government help in serving those areas which could not obtain power from private firms.

Justice O'Donoghue also rejected Mr. Acheson's suggestion for an injunction to prohibit temporarily the expenditure of Federal money only on those lines which would parallel the power company's lines. It was the first time the REA had been named in a suit testing its right to lend money for construction of power lines.

Vincent D. Nickolson, REA counsel, argued that the power company was not interested in serving Cherokee county rural residents until the coöperative was formed. Then, he declared, "spite lines" were built in an effort to block the project. He said the company tried to induce farmers in the area to abandon their coöperatives, and used "false representation" in seeking customers for its own lines.

Lower Power Rates Asked

A COMPLAINT against the Birmingham Electric Company, seeking reduction of two of the company's commercial rates, was filed with the state public service commission in Montgomery on October 8th by attorneys for 30 Birmingham business establishments.

The complaint attacked rates charged by the company for schedule H-2, applied to combined lighting and power service, and schedule CS-2, for commercial service.

It also charged the company had failed to comply with Rule 13 of the commission, which, according to the allegations, makes it the duty of the company "to determine at intervals not to exceed twelve months the lowest applicable schedule or schedules of rates based upon a survey of the recorded requirements of customers for service during the twelve monthly billing periods preceding the date of the study" and provides that "the customer shall be notified in writing if the survey shows a lower rate schedule applicable."

The attorneys asked the commission in their petition to determine if this rule has been violated and, if it is found that it has, to determine the amount of damages and reparations due to be repaid to "these complainants and others similarly situated."

The complainants charged the two rate schedules under attack were "unjust, unreasonable, unfair, excessive, and oppressive and do not bear a reasonable or fair relation

to the cost of furnishing said service or the maintenance thereof, nor do the same bear any reasonable relationship to a fair and reasonable charge for such service, taking into consideration the cost of furnishing and maintaining the same."

The petition also attacked the "demand" rate of schedule H-2 as unreasonable and declared the period of time, fifteen minutes during any month, on which the demand rate is established, was too short.

Phone Rate Cut Stands

THE state supreme court declined on October 7th to alter or remand to the state public service commision for "further fact finding" and reduction a $250,000 Southern Bell Telephone Company rate cut ordered April 2, 1936.

The justices affirmed a Montgomery circuit court ruling dismissing motions filed by Attorney General A. A. Carmichael and Horace Wilkinson, attorney for the city of Birmingham, demanding court review or reconsideration of the reduction order by the commission. The $250,000 reduction, announced by Governor Graves as a "compromise" after months of hearings, was assailed at the time by Wilkinson and Carmichael as "inadequate," and they contended a minimum cut of $450,000 to $500,000 was justified.

When Carmichael and Wilkinson appealed to Montgomery circuit court from the commission's order, the state public service commission filed an intervenor's petition and contended, as did the telephone company, that the state and city of Birmingham had no authority to contest the order and the court was without jurisdiction. The supreme court's decision stated:

"The matter of rate making is legislative, and the courts have no right to sit as a board of review to substitute their judgment for that of the legislature or its agents in matters within the province of either. . . . The mere fact that the city (Birmingham) was dissatisfied and insisted the rates should be still further reduced did not tie the hands of the commission and require it to sit silently by while the order that it had made was under attack."

Arkansas

Files Notice of Appeal

THE Arkansas-Louisiana Gas Company filed notice of appeal to the U. S. Supreme Court on October 8th from a state supreme court decision giving the state utilities commission authority to regulate sales to pipeline consumers.

The state supreme court overruled last spring the gas company's contentions that its gas was transported in interstate commerce and therefore not subject to regulation by the utilities commission. The company pipes the gas from its fields in Louisiana and east Texas and taps the lines within the state for distribution to consumers. The state supreme court last month denied a rehearing.

In his opinion handed down last spring, Chief Justice Griffin Smith said the company "has developed a practical system, whereby, if let alone, more than half of its sales in Arkansas will escape regulation by the state."

Rate Cut Ordered

THE state utilities commission on September 27th issued orders for the Citizens Electric Company of Hot Springs to show cause why it should not reduce its annual gross revenue by $70,000, or about 14 per cent, and for the Hot Springs Street Railway Company to show cause why its present transportation facilities should be continued. Hearings on the orders will be held November 1st in the commission's offices.

Gross revenue of the Citizens Electric Company for 1936 was approximately $488,000, auditors of the commission's staff said. A preliminary investigation of the company's rates, values, revenues, and expenses was ordered June 15th. The proposed reduction was recommended on the basis of the investigation. It was considered probable that the department of public utilities would suggest lower rate schedules if the company fails to reduce its rates voluntarily.

If the Hot Springs Street Railway Company fails to show cause why its present facilities should be continued it will face three alternatives: improve present facilities; surrender the street railway franchise, or substitute buses for the street cars now in use.

Commissioners said records in their files showed that for many years the railway company's revenues have been inadequate for continued operation without assistance. It charged that excessive earnings of the electric company "apparently have been used to subsidize the street railway company."

Coin Phone Regulation Attacked

THE city of Fort Smith, in a brief filed with the state supreme court recently, charged that the state commission acted in a "judicial" rather than a "legislative" capacity last fall when it set up a schedule of telephone rates for the city, thereby voiding a city ordinance prohibiting pay telephones.

The brief was filed in the city's appeal from a Pulaski circuit court decree holding that the state commission had authority to regulate telephone service in Fort Smith. The utilities commission contended its rate schedule was issued in a legislative capacity.

California

Phone Rates Cut

THE state railroad commission last month announced a reduction of $328,000 annually in long-distance telephone rates throughout the state, effective November 1st. This was the second such reduction within a year. The last amounted to about $260,000 a year.

The new cut, affecting both the Pacific Telephone and Telegraph Company and the Southern California Telephone Company, will apply chiefly to distance greater than 88 miles. It lowers rates for such from 5 cents to 50 cents.

The decrease was generally opposed, but not contested, by telephone officials who maintained that increased labor costs and taxes made such reductions inadvisable. In a formal statement they declared their desire to serve the public by reducing rates and expressed the hope that the public would respond by making greater use of long-distance service.

Municipal Utility Faces Ban

BY a vote of 4 to 1 the Glendale city council on October 5th took action indicating it would order the municipal public service department to discontinue the sale of electric ranges in competition with privately operated enterprise.

The action came three days after electric appliance dealers threatened to circulate petitions for a special election to decide the issue. The council instructed City Manager Ingham to work out a plan providing for the elimination of the sale of ranges by the department. The controversy had been before the council since last July.

Power at Stake

TWO proposals will be on the ballot November 2nd when Redwood City voters will decide whether the city is going to distribute electricity as a municipal venture.

Under the first voters will be asked whether or not they wish to issue $575,000 in bonds to acquire the Pacific Gas and Electric Company properties through eminent domain proceedings. Under the second voters will be asked to issue this amount of bonds either to finance a competing system or for purchase of the Pacific Gas and Electric system through negotiation with the utility.

Colorado

Plan Raise in Utility Values

RECOMMENDATIONS by the governor's advisory council for increases in the assessed valuation of public utilities, including the railroads, and certain real estate were presented to the Colorado state board of equalization recently.

The advisory council, in a report signed by R. G. Montgomery, state budget and efficiency commissioner, suggested that: (1) valuation of utilities, including the railroads, be raised to 70 per cent of the valuations they use for rate-making purposes; (2) valuations of other real property be increased in proportion to the actual increase in their value.

No action was taken on the recommendations at the meeting, the board giving its attention to an argument by Professor G. S. Klemmedson of the Colorado state college for an increase in utility valuations. Klemmedson, who has been detailed to special service for Governor Teller Ammons, assailed utility valuations as too low.

Georgia

Delays Power Hearings

THE state public service commission recently postponed until "the first part of next year" a hearing on commercial rates of the Georgia Power and Light Company. The company, serving a large section of south Georgia, was cited to show cause why its commercial rates should not be reduced.

A reduction in residential rates already has been ordered by the commission in an agreement with the company.

Indiana

Tax Law Appealed

THE city of South Bend on September 30th asked the U. S. Supreme Court to declare unconstitutional an Indiana law which requires municipal utilities of that state to pay county and state taxes.

The city's petition asked the court to review a decision of the Indiana tribunal which had upheld the validity of the act. Prior to 1933 municipal utilities in Indiana were tax exempt but the state legislature in that year enacted a law requiring them to pay the state and county levies.

South Bend, which owns its own water plant, filed suit against the law, contending it was invalid. The state supreme court upheld the constitutionality of the act several months ago. The Indiana Municipal League, which includes most of the cities in the state owning their own utilities, joined in carrying the fight to the U. S. Supreme Court.

Iowa

Power Test Dropped

ONE of the tests of the Public Works Administration's constitutional authority to finance publicly owned hydroelectric plants in competition with private enterprise was abandoned when the U. S. Supreme Court, on agreement of counsel, on October 5th dismissed the suit affecting Iowa City. The Iowa community has decided not to build a municipal plant. The PWA had arranged a grant of $413,000 to the $1,000,000 project.

Abandonment of the Iowa case did not, however, affect a similar suit of the Alabama Power Company against loans to various towns in that state. The Supreme Court agreed last spring to hear argument on this case and the test remains before the court.

Power Co-op Gets Allotment

THE Rural Electrification Administration recently announced a $100,000 Iowa allotment, but said this marked no determination of policy as to the future REA program in that state. The funds were made available to the Grundy county rural electric coöperative of Grundy Center, for further construction of 249 miles of lines supplying electrical energy to about 900 customers.

The coöperative previously had received $100,000 and is in line for a further smaller amount when additional funds are available, REA representatives said.

The REA had been holding up the Iowa program pending a determination of responsibility of cost of eliminating interference which power lines were said to be causing on rural telephone lines. The REA said that if its borrowers were required to make the interference-elimination changes a redetermination of costs of the projects, for which it was prepared to lend REA funds, would be necessary.

In the case of the Grundy county coöperative, an agreement provided that telephone companies would make no claims for "inductive or conductive interference."

Kentucky

Plan Rate Body

REPRESENTATIVES of utility companies operating in Kentucky agreed at a recent conference held at Frankfort to coöperate with the state public service commission in endeavoring to work out a system of maintaining continuous inventories for rate-making purposes.

Each group of utilities, telephone, electricity, gas, and water, named a committee of three men to consult with the accounting staff of the state commission.

Massachusetts

Withdraws REA Loan

FUNDS for the Bay state's only rural electrification project, organized to bring electric power to 680 isolated farms in Franklin, Hampshire, and Berkshire counties would be withdrawn because of the failure of the state department of public utilities and Chairman A. C. Webber to coöperate in the program, it was learned recently from officials of the Rural Electrification Administration.

John M. Carmody, chairman of the REA,

was to issue an administrative order revoking an earmarked loan of $255,000 to the Tri County Electric Company, The Farmers' Coöperative, and the money will be used for electrification projects in other states.

This action, officials said, was taken with the greatest reluctance, since the Tri County farmers will be precluded from seeking another loan for at least a year, and private power companies have confessed their inability to serve the remote and thinly populated area.

However, the opposition to the program, both by the state utilities commission and by private power companies, it was said, has been so strong that REA despairs of approval by the state commission, and has decided the funds can be used profitably in other sections of the country.

Fix French Phone Price

THE monthly service charge for the use of hand telephone sets or so-called French phones was ordered abandoned last month by the state public utilities commission. In place of the monthly charge the commission established a cost price of $1.40 for the substitution of a French phone for the old-fashioned standing set.

In the past the companies charged 15 cents a month for eighteen months for the use of French telephones. Recently they applied to reduce the monthly charge to 10 cents a month for twelve months, but sought to add a flat charge of $1.50, making a total price of $2.70 for one of the special sets. The order of the commission would result in a saving of $1.30 for the subscriber.

Minnesota

Gets Power Ruling

ATTORNEY General William S. Ervin on September 30th said the city of Rochester may sell surplus electrical energy from its municipally owned light and power plant without jeopardizing its plants and physical properties from their tax-exempt status.

That advice was given the Minnesota tax commission with reference to its power to tax Rochester's hydroelectric plant situated in Wabasha county.

Rochester has two plants, one in the city and the other in Wabasha county, and recently made improvements on both to allow for future expansion. As a result, there has been a surplus of electrical energy. The city proposed to sell this power to the Goodhue County Rural Coöperative Association, it was said.

New York

Hand Phone Fee Ended

THE New York Telephone Company was ordered by the state public service commission on October 5th to discontinue the 10-cent monthly charge on handset telephones beginning January 1st.

Elimination of the monthly charge will bring an annual saving of $625,000 to 1,558,891 subscribers throughout the state. As a result of this order and one issued last February eliminating the charge to subscribers who had made payments for a 2-year period or more, total savings to subscribers will be between $2,150,000 and $2,220,000.

The New York Telephone Company announced it had agreed to comply with the order "with reservations as to what action might later become necessary." The commission pointed out that, with the handset reduction order in May, 1933, and including the present order, various reductions in both local and toll rates now total about $7,000,000 annually. In the same period taxes will have increased about $17,000,000 annually, it said.

The commission acted on the recommendation of its chairman, Milo R. Maltbie, who conducted negotiations with the company. Mr. Maltbie said:

"The legislature of 1937 increased the tax burden of the company; but there has also been an improvement in business conditions since the first of the year. This improvement was quite marked until recently and might have justified an immediate elimination of the handset charge had it not been for the increase in taxes."

Municipal Plants Ordered to Pay Interest

THE state public service commission recently ordered all municipal electric plants in New York state to pay the legal 6 per cent interest rate to consumers who have made deposits to secure payment for electric service and to credit such interest on bills at regular 2-year intervals. The order also provided that the amount of deposit which a municipal electric plant may require shall not exceed the estimate of two months' bills.

Interest on deposits required by municipal

utilities is to be credited on bills submitted after October 1st of each odd-numbered year and paid to the depositor if the deposit is returned prior to that time, according to the commission's order. The order also provides that municipalities now requiring deposits shall credit depositors with all accumulated interest on the deposit at the rate now allowed by the municipality, to November 1, 1937, on the next bill submitted after December 1, 1937.

The commission's rules governing requirement of deposits by municipal electric plants become effective November 1, 1937, and will continue in effect for three years unless otherwise ordered by the commission.

Ohio

Gas Controversy Hearings

POSSIBILITY that the hearings on the appeal of the Ohio Fuel Gas Company on the 48-cent rate ordinance, pending before the state utilities commission, may extend into 1938 was indicated recently by James W. Huffman, special counsel for the city, as further efforts were made to break down valuations of gas properties held by the company under lease and in fee.

Huffman asserted that "as long as the company places upon the witness stand witnesses for both the Ohio Fuel and the United Fuel Gas, we intend to cross-examine them upon their testimony." He pointed out that after company witnesses have been cross-examined the city will present its witnesses and that after cross-examination by the company briefs will be filed and the disposition of the case placed in the hands of the state commission.

Rejects Gas Plan

HEADING a plea that Akron should get the equivalent of $900,000 before settling its 6-year rate stalemate with the East Ohio Gas Company, the city council recently rejected a proposal which Councilman Edmund Rowe offered as giving Akron approximately the Cleveland rate. Rowe's offer was rejected by a 10-to-2 vote.

Rowe proposed taking a $300,000 refund allowed by the state public utilities commission in the Akron case, asking the company for $120,000 allowed it for litigation cost and for an additional $50,000 to pay part of Akron's rate fight. Rowe explained that his plan would mean approximately the Cleveland rate from the time that became effective to May, 1937, and would allow the company to collect for three more years the present disputed average rate of 64.5 cents a thousand cubic feet.

Pennsylvania

Municipal Operation Asked

OFFERING his "final word" on the pending municipal gas lease, Mayor S. Davis Wilson told the Philadelphia city council, as it resumed hearings in the lease on October 8th, that he would veto any contract which did not contain a provision for a 50-cent gas rate and concluded his statement with a lengthy argument for municipal operation.

Referring to the United Gas Improvement, he read from a prepared paper 10 reasons why he thought that company should not be given a renewal of its present lease expiring December 31, 1937, to operate the city-owned gas plant. While some of the 10 reasons seemed to duplicate each other, it was said, in brief they were based on the Koppers Coke contract, which U.G.I. made during the life of the present lease, and under which, according to testimony given at the hearing, the city at the present time is now purchasing seven-eighteenths of the gas consumed in Philadelphia at a price 14 cents higher than gas is now being made in the city plant.

He predicted that even if the city desired to enter a lease under the terms proposed by U.G.I., it would not be passed by the state public utility commission, naming as an objection the proposed $600,000 management fee. For the past ten years under the present lease the U.G.I. has received a fee of $800,000 annually.

Referring to the new offer of U.G.I. made by its president, John E. Zimmermann, which included a "trial rate" under which reductions would be made to consumers of more than 2,000 feet, Mayor Wilson said the offer was "ridiculous and entirely unsatisfactory."

Taking up the question of municipal operation to which there is considerable opposition in the city council, the mayor reviewed the history of the city's successful operation of the municipally owned water plant. He said that the engineering problems in connection with the operation of the Philadelphia municipal water plant were much more involved and intricate than in the operation of the gas plant.

Refund Order Becomes Permanent

THE state public utility commission on October 8th made permanent its temporary order of June 1st requiring utility companies to refund deposits to customers who have paid undisputed bills for twelve consecutive months.

The order requires the companies to pay interest of 6 per cent on the deposits and prohibits deductions for taxes. It defines an undisputed bill as "one which has been paid with or without discount or penalty within sixty days following the period for which the bill was rendered, or one that has been paid within thirty days following presentation of the bill."

Persons eligible for refunds cannot subsequently be required to post deposits with the same company for service, under the order, "unless the service has been discontinued and the customer's credit standing impaired through failure to comply with the company's tariff provisions."

Companies are allowed, however, to require deposits of customers who have not become eligible for refunds and all new customers. The minimum deposit is $5, the maximum not to exceed the "estimated gross bill for any single billing period plus one month." The commission announcement said:

"Ready-to-serve or other charges for which no given amount of service is included, are prohibited except that until otherwise ordered by the commission, electric utilities may impose such charges if based on kilowatts of demand. Minimum or initial charges, including a given amount of service, are allowed."

Toll bridges and tunnels, pay telephones and prepayment gas meters were unaffected by the order.

Rate Slash Ordered

THE state public utility commission's order of October 7th clipped off more than half of the estimated net profits of the Solar Electric Company. The commission's order assured that 1,100 of the company's 1,600 customers would get immediate and substantial savings. Although small in amount, the cut was said to represent one of the most drastic cuts imposed by the commission since it began using its new and wider powers.

The reduction climaxed an 8-year fight by residents and officials of Brookville to get lower rates. The case had been pending since 1929 when the new commission took charge of it four months ago and speeded action.

Chief features of the commission's order included (1) simplification of the company's rate schedule by elimination of 15 complicated schedules and the establishment of one rate schedule for all classes of consumers, except street lighting; (2) elimination of a 95-cent "service charge" for which the consumer got no current and substitution of a 50-cent minimum charge for which seven kilowatt hours is given; (3) fixing of the company's fair value tentatively at $200,000 and the allowable profit at $12,000 instead of the $25,000 it was estimated the company would earn this year under the old rates.

South Carolina

Phone Probe Averted

A SWEEPING investigation of telephone rates in South Carolina was held averted recently in view of an agreement reached between the state public service commission and the Southern Bell Telephone Company. The company offered, after a long series of conferences, a voluntary reduction in rates which the commission accepted.

The commission announced that an agreement had been reached which would assure "substantial reductions" for users of telephones in the Bell system and in some of the independent systems in the state. An advantage in the new plan of rate reductions, the schedules for which were being worked up, was that the cuts would come into effect on bills for November, it was pointed out. Often, it was explained, there are long delays when reductions are brought about by investigations and orders.

The new reductions resulted under an act of the general assembly which specified that in the event the telephone companies of the state did not offer reductions satisfactory to the commission by October 1st, the commission was authorized to proceed with an investigation, the goal of which would be enforced reductions.

Santee Injunction Given

THE U. S. Circuit Court of Appeals on October 1st granted a temporary restraining order to prevent start of construction of the PWA $37,500,000 Santee-Cooper power and flood control projects in South Carolina.

The order, entered by the court with the consent of counsel on both sides, allowed construction to be held up provided a total of $750,000 not be withheld from the South Carolina Public Service Authority by Secretary Ickes and the PWA. Of this amount $150,000 was allowed for expenses of litigation, $350,000 for obtaining an option on land and timber but not for purchase, and $250,000 for engineering expenditures, including

field surveys, investigations, and temporary required structures.

The case is to be set for hearing during the January term of the U. S. Circuit Court of Appeals after which a final decision by the Supreme Court is expected.

Texas

New Tax Bills

THE state House Revenue and Taxation Committee early this month recommended a $10,000,000 omnibus tax bill, approved an ad valorem assessment equilization bill, and scheduled hearings on other measures in a campaign to raise $15,000,000 new revenue.

Under the new bills, the levy on natural gas would be increased from 3 per cent to 4.4 per cent of its market value. That rate also would apply to imported gas when sold within the state, provided no severance tax had been imposed on it by the state in which it was produced. The existing levy on the production and sale of gas yields $600,000 a year and it is estimated that the higher levy proposed by the pending bill would yield $1,000,000.

The levies on the gross receipts of telephone companies, now 1¼ per cent on those derived from business outside of incorporated cities and towns and within such cities and towns of less than 2,500, 1¾ per cent on business done in cities of more than 2,500 and not more than 10,000, and 2 per cent on business done in cities of more than 10,000 would be increased to 2, 2½, and 3 per cent, respectively. The revenue would be increased from $656,000 to an estimated $875,000.

Utility companies—gas, electric light and power, waterworks and light—now pay seven-tenths of one per cent on gross receipts in towns of from 2,500 to 10,000 and 1¾ per cent on receipts in towns and cities of more than 10,000. Under the pending bill the rates would be one per cent and 2 per cent. As reported, the bill proposed to levy one per cent on receipts in towns of from 500 to 2,500, but that bracket was stricken out by the committee in deference to the argument that it might operate as a hindrance to rural electrification projects, with the result that the gross receipts which utility companies derive from towns of less than 2,500 will continue to be exempt from taxation.

However, it was argued that a levy on that category of receipts of private utilities would be advantageous to municipal plants in their efforts to serve rural communities, and that argument may be presented to the house when the bill is taken up for consideration.

West Virginia

Takes Jurisdiction

THE farmers' coöperative associations financed by the Federal Rural Electrification Administration in Harrison and Hardy counties will be required to obtain certificates of convenience and necessity from the state public service commission, the commission announced last month.

The commission's statement followed conferences between representatives of the coöperative associations, the REA, and officials of the road commission, attorney general's office, and public service commission, in an effort to obtain permission to construct electric power lines on rights of way of the state road system.

The attorney general in an opinion prepared by Forest B. Poling, an assistant, recently declared that before the road commission should grant a permit, the question of whether or not the coöperative association is a public utility should first be settled by the state public service commission, subject to supreme court review. The attorney general said his office is not a fact-finding department and has neither the authority nor the mechanics for such an investigation.

Chester Lake, REA counsel, and Allen Moore, REA field representative, conferred with Poling in an effort to convince him that the coöperatives were not utilities. Poling, however, reiterated the opinion that the public service commission or the courts should determine their status.

The commission said that facts and circumstances indicated that the public service commission law of West Virginia applies to these cases and said coöperatives are subject to the state law; and that, therefore, such coöperatives should procure certificates of convenience and necessity from the commission before applying to the state road commission or other governmental agencies for franchises or permits to use and occupy streets and highways in the state.

REA officials subsequently said the administration did not feel that the state had sufficiently clarified its position. They said no court case existed until a ruling could be obtained on the state attorney general's opinion that the question is a matter for the courts.

The Latest Utility Rulings

New York Court Sustains Commission Rulings on Valuation

A RATE order of the New York commission was sustained by the court of appeals against attacks by the utility based largely upon criticism of valuation methods. Moreover, the court could not say that in 1933 a rate of return of 6 per cent was unreasonable for a water utility.

A determination of fair value based largely upon reproduction cost during a period of depression prices was upheld. The court refused to weigh the evidence or to substitute its judgment for that of the commission on questions of fact. It recognized that current or spot prices fluctuate and reproduction cost based on such prices constitutes a variable measure of value, but in the words of the court:

> Even so, the cost of reproduction at current or spot prices is a factor to be considered, and at times, indeed, the dominant factor in fixing present values, and a value so fixed may be the starting point for prophecy of future values . . . Prophecy, though based on past experience, is uncertain, and the probable trend of prices is a matter upon which the opinion of qualified students of economics and economic history may properly be asked.

The opinion or prophecy of expert witnesses as to the continuance of low prices had been proven wrong by events occurring during the interval between the hearing and the commission decision, but the court said that the party who attacks the correctness of the decision must show that intervening events have destroyed the force of the opinion testimony. The court continued:

> The commission in determining the rates for the future could act only upon data known at that time. The determination must be based upon prediction and is not invalid if it is based upon prediction which is reasonable. Otherwise rates could never be fixed in advance.

No error was found in the action of the commission in giving preponderant weight to cost of reproduction less depreciation over historical value, cost to the utility company, or book value. The company had acquired the assets of existing corporations in exchange for capital stock and bonds. The original or historical cost of the property so acquired did not appear, and there was nothing to show that it had any relation to the amount of the purchase price in stocks and bonds. The amount shown upon the books of the original companies was only a fraction of the new book value attached to the same assets after they were bought by the company under investigation. *People ex rel. Consolidated Water Co. of Utica v. Maltbie et al. 275 N. Y. 357, 9 N.E. (2d) 961.*

Commission Establishes Term of Contract for Resale Service to Municipalities

THE Wisconsin commission held that the broad powers conferred on the commission by statute gave it authority to prescribe the term of a contract as a condition of availability of any particular schedule of rates for resale service, although counsel for municipalities contended that the commission had authority only to prescribe the rate. Municipalities are given the right

by statute to contract for light or heat.

The commission took the position that the term of a contract for resale service is a vital and essential part of the rate and should be prescribed as a condition of its availability. Reference was made to the type and character of these resale contracts, which differ in many respects from ordinary commercial contracts. Both the utility company and the municipality purchasing power are subject to certain restrictions because of the public interest involved. The market is highly competitive and hence the retention of resale customers is beset with uncertainty. The commission said in part:

> Under ordinary conditions the municipalities are free to shop around for a source of supply and choose that which they think would best suit their needs. The fact that the alternative source of supply finally selected may result in higher costs of energy is no barrier. On the other hand, the vendor utility is not free to select its customers but must serve all customers within its territorial confines under reasonable extension rules. Except as the vendor utility obtains indeterminate permit or other operating rights in municipalities, it is limited in its territorial expansion. Its problem with respect to its other customers who are in a position to utilize alternative sources of supply is not so serious as in the case of municipal resale service. Such service is sold largely on a cost basis and, other things being equal, industrial customers prefer investing money in materials and processing equipment rather than electric generating facilities. This is particularly true of those industries which require a frequent turnover of invested capital to produce a profit. Because of the preponderance of fixed charges in the cost of generating electricity, investment in such equipment has a notoriously low rate of turnover and is not attractive to industrial customers unless substantial savings in costs can be demonstrated.
>
> There are other distinguishing factors in municipal resale service such as the degree of voltage regulation, the necessity for continuity of service, the customer's lack of control over its energy requirements, etc., which distinguish it from other classes of public utility business rendered by the vendor. All of the factors enumerated, as well as others, combine to make resale business relatively expensive to serve and hard to hold.

In the case of large industrial customers, it was pointed out, the utility company can be fairly certain of retaining the business so long as the utility's energy costs compare favorably with those which could be obtained by other methods. Furthermore, even if some industrial customers are lost, the investment is not serious since most industrial customers are located in urban areas where facilities are used jointly to serve a number of customers. These other customers provide a diversity in the use of the distribution facilities, thereby reducing the unit investment per customer. This situation does not obtain in the case of resale customers.

A 10-year contract period for existing resale customers was held to be unreasonable, although such a term was held to be reasonable for the initial service period of new customers requiring special additional investment in excess of five times the anticipated annual revenue. The commission held to be reasonable a contract term of ten years with a cancellation privilege at the expiration of five years as a condition of availability of such rates for existing customers, and for new customers after the expiration of an initial 10-year term. *Re Northern States Power Co. et al. (2-U-657).*

Emergency Rate Increase to Cover Emergency Tax Is Denied

An application by the Wisconsin Telephone Company for authority to impose a temporary surcharge of 4.4 per cent on its local exchange rates, with certain miscellaneous rates excepted, for the purpose of reimbursing itself for the payment of an emergency tax assessed against it for the fiscal year 1936-1937 was denied by the Wisconsin commission.

The commission took the position that although it was empowered by statute to authorize a temporary increase in rates to enable a public utility company to reimburse itself for the payment of the tax, in the same manner as it would be empowered to enable the company to meet any other unforeseen and unusual expense threatening to injure the company, this was an extraordinary power to be used only under extraordinary circumstances. Only such circumstances as constitute an emergency to the public or to the utility, it was said, justify its exercise.

Even though the rate of return for 1937 should, by reason of the emergency tax, fall below a full reasonable normal rate, the commission was of the opinion that this result of itself would not necessarily constitute an emergency justifying a temporary increase in rates in order to meet it. The commission, in its opinion, made the following statement:

> Rates cannot practicably, and need not legally, be adjusted and readjusted for every unusual or unforeseen nonrecurring expense to which a utility is put, and the evidence here fails to justify a finding that a sufficient exigency exists in the situation to warrant an exercise of emergency powers. It is not necessary that the emergency be a life-or-death matter or that a utility be brought to the brink of bankruptcy before the commission may properly exercise its emergency powers; but the emergency must be a real and substantial one, and at least commensurate with the remedy sought. Here the business of the applicant has improved and it is improving with the upturn of business activity; it declared a dividend of 6 per cent on its common stock at the end of 1936; its solvency and credit are not threatened; its ability to continue to render service to the public is unimpaired; and no such deprivation of a fair return on its property as would require emergency relief has been shown. The granting of substantial wage increases so late as June 7, 1937, does not indicate an alarm on the part of the management for the financial stability of the company.

Re Wisconsin Telephone Co. (2-U-1088).

Discrimination in Furnishing Electric Service for Submetering

A JUDGMENT against an electric company for damages on account of discrimination in furnishing electricity for submetering to tenants was sustained by the supreme court of Rhode Island, although an interest allowance on damages awarded was modified. The court held that the company could not lawfully deny service to be resold to tenants through a master meter when it was furnishing such service to others under the same conditions.

The court first disposed of a contention that the trial court was without jurisdiction of the case because the state division of public utilities had primary jurisdiction. In the opinion of the court there was no good reason for construing the state Public Utilities Act as the Interstate Commerce Act had been construed. It was said that under the latter act, if actions requiring determination of the reasonableness of established rates, regulations, practices, and the like, could be brought in the district courts of the United States, the same questions might be decided differently in many different parts of the country and the result might be chaos. Such a result would defeat the obvious purpose of that act. But under the state law there would be no such difficulty; the statute should therefore be construed in accordance with its express language. Under the Interstate Commerce Act the commission has power to award damages, which is not the case under the state law.

The plaintiff was not attacking the reasonableness or validity of a rule or practice of the utility in giving service through master meters. It charged either a violation or discrimination in the enforcement of that rule or practice. The court was not concerned with the question whether the utility was to be compelled to sell electricity to be re-

metered and resold at retail to the ultimate consumer by either the landlord or its agent.

Upon a consideration of all the evidence and circumstances presented, the court could not say that the decision on the question whether there was discrimination without substantial grounds because of different circumstances was entirely without support in the evidence or that the decision on this issue was clearly erroneous. *Main Realty Co. v. Blackstone Valley Gas & Electric Co. 193 Atl. 879.*

Permit for Dam Denied to Preserve Scenic Beauty

PRESERVATION of natural scenic beauty as an idealistic objective has been forced to give way before the onrush of civilization with its demands for satisfaction of material needs. Aesthetic considerations have received some recognition in zoning laws and other restrictive regulations, but it was for the Wisconsin legislature to enact a statute for the purpose of preserving the natural beauties of its water courses. The statute reads:

> The enjoyment of natural scenic beauty is declared to be a public right, and if the commission shall find that the construction, operation, or maintenance of a proposed dam is contrary to the public interest, when the public right to the enjoyment of natural scenic beauty is considered, no permit shall issue.

Acting under this statute, the Wisconsin commission has denied a permit to an industrial company to construct, operate, and maintain a dam across the Potato river. The commission observed that because of the outlook for sale of the company's products there was no economic need for the development, but the decision was placed primarily upon the ground that any advantages would be counterbalanced by the fact that the waterfalls and cataracts for about one mile of river would be forever destroyed, and that the sudden rising and falling of water in the stream would destroy fish life. The commission described the stream, stating:

> It contains many cataracts, rapids, and waterfalls and flows through deep and wide gorges of great scenic beauty. There are no dams in the river. Its flow is unimpeded by the works of man from its source to its mouth. It is and has been a trout stream of considerable importance. No sewage or industrial wastes contaminate its waters. Long stretches of the river have many cataracts and rapids which are visible from numerous vantage points along its course. It is one of the few scenic streams in the state unspoiled by man.

The advantages which the public would derive from the proposed development would be that a town would derive more taxes from the lands in question and the hydro plant and the industry in connection therewith would give employment to a few men. *Re Mellen Granite Co. (2-WP-326).*

Refinancing Authorized to Eliminate Bond Issues

AN electric utility was permitted by the New Hampshire commission to issue common stock for the purpose of redeeming and retiring all the outstanding funded debt. A capital structure consisting entirely of common stock, in the judgment of the commission, constitutes from many points of view "the most flexible, and therefore the most desirable, type of financing possible."

The commission said that the prudence of a utility management failing to explore and exhaust the possibilities of advantageous refinancing under prevailing conditions might well be questioned seriously. Concerning financing, it said:

During recent months the prevailing conditions of the money market have created particularly favorable opportunities for refunding operations whereby utilities might effect substantial reductions of their payments for borrowed capital, and thus of the ultimate costs of their service. In the long run such savings must react to the general benefit of the public which is served. Taking advantage of these conditions, certain of the major electric utilities operating in New Hampshire have, with the encouragement of this commission and under its newly adopted policies with respect to competitive bidding, engaged in an extensive refinancing program, during the course of which more than $45,000,000 of securities have been issued and sold competitively. . . . This refunding has accomplished a reduction of the average coupon rates on the securities involved from approximately 5 per cent to roughly 3¼ per cent, permitting an apparent saving of about $675,000 annually. Weighing the premiums received against the necessary costs of refinancing and the unamortized balances of debt discount and expense outstanding against the retired securities, it is not unlikely that the annual savings have in fact exceeded that figure. Projecting these cumulative savings over the 25-year average life of the new issues yields an aggregate economy of at least $16,875,000.

Re Granite State Electric Co. (D-F1844, Order No. 3318).

Commission Decision on Status of Affiliated Distributing Company Sustained

THE appellate division of the New York supreme court upheld an order of the state commission [13 P.U.R.(N.S.) 101] directing the Iroquois Gas Corporation to carry in its accounts and to report receipts from gas produced by the affiliated United Company and delivered to the Iroquois as receipts from the sale of gas purchased from the United. The terms of a contract between these companies made the transaction one of agency, the Iroquois acting for the principal. The court said:

> No disclosure is made as to why the commission is interested in having the accounts and reports indicate a sale, or why the company so strenuously objects to making the entries. No showing is made by the company that financial loss will result to it by observing the order. In determining the real relation, the language of a contract between two wholly owned subsidiaries of one holding company is of much less importance than the facts surrounding the transaction. It is hardly to be assumed that the commission has made this order for the purpose of marching the Iroquois up the hill and then to march it down again. Rather I would assume that the commission believes the transaction to be a purchase and sale, and that the written contract indicating agency would befuddle the issue in a proceeding to fix a fair and reasonable rate to be charged consumers. Separate corporations, with common stock ownership, should not be treated as individual entities if thereby reasonable regulation is hampered.

Iroquois Gas Corp. v. Maltbie et al. 297 N. Y. Supp. 907.

Borrowing Funds from Parent Companies

THE Pennsylvania commission authorized several subsidiaries of the American Water Works and Electric Company to borrow money from their immediate parent companies in the American Water Works system and to pay simple interest at not exceeding 6 per cent per annum upon the average monthly balances, but the commission refused to authorize such borrowing where the parent companies were also Pennsylvania utilities. It was said to be against the commission's policy to have one Pennsylvania utility lend its funds to another.

The commission, in authorizing the borrowing, stated that it was to be understood that approval should not bind the commission in any rate or other proceedings to allow a return to any petitioner equal to the interest paid. *Re The Butler Suburban Water Co. et al. (Application Docket Nos. 36157–36188).*

Other Important Rulings

THE California commission, in authorizing a property transfer and the issuance of securities after referring to assets and liabilities together with expense items, said that the commission's reference to such figures was not tantamount to a finding that they were correct and not subject to adjustment in the event of a rate proceeding. *Re San Gabriel Valley Water Service et al. (Decision No. 29954, Application No. 21250).*

The New York Court of Appeals sustained a defense interposed by railroads in an action to compel the erection of a railroad station pursuant to the terms of a contract where the defense was based upon the ground that conditions had changed, that public convenience did not require erection of the station, that stoppage of trains at such a station would interfere with efficient operation, that erection of the station would injure the public interest, that specific performance would injure both parties and benefit neither and that legislation enacted subsequent to the contract rendered it unenforceable. *New York v. New York Central R. Co. et al. (275 N. Y. 287, 9 N. E. (2d) 931).*

The supreme court of Michigan, in affirming a judgment dismissing a suit against a telephone company for penalties because of the denial of flat rate telephone service, held that by placing broad powers of control in the hands of the commission, the legislature by implication, if not actual direction, had repealed an act relating to service and recovery of penalties, at least so far as the collection of penalties was concerned. *Couvelis et al. v. Michigan Bell Telephone Co. 274 N. W. 771.*

The Arizona commission ordered taxi operators in Tucson and vicinity to install meters in order to make charges uniform and to protect the public against overcharges. The commission observed that Tucson was recognized as one of the leading winter tourist resorts of the nation and that during the tourist season visitors unfamiliar with distances and proper charges for taxi service thronged to the city. *Re Taxi Operators in Tucson (Docket No. 7148-S-4806, Decision No. 9080).*

The U. S. Court of Appeals for the District of Columbia agrees that service charges paid by a utility to an affiliate may be allowed in a rate case, but holds that such charges should not be included when the Federal Power Commission determines the "actual legitimate cost" of a project licensed under the Federal Power Act. This ruling was part of a decision sustaining, except as to certain minor points, an order of the FPC concerning the Alabama Power Company. The court also sustained the commission in refusing to allow, as part of the cost of a hydroelectric project, taxes paid on project lands prior to the construction period and interest on preconstruction expenditures. Overruling the FPC, however, the court upheld the allowance of more than out-of-pocket cost of electric energy supplied by the licensee for construction purposes. The court held that this amount should include proper allocations for taxes, depreciation, etc., but no profit. *Alabama Power Co. v. Federal Power Commission.*

The U. S. Supreme Court denied the request of the Georgia Power Company for a review of an injunction prohibiting it from seeking to restrain TVA operations. The high tribunal refused to review a decision against the power company by the Fifth Circuit Court of Appeals at New Orleans. The Fifth Circuit Court of Appeals had held that the Georgia and Tennessee District Courts had concurrent jurisdiction, but that the Georgia ruling should stand since it came first. *Georgia Power Co. v. TVA (Case No. 69-70).*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be publised in full or abstracted in *Public Utilities Reports.*

Appendix

Important addresses on questions of public interest at the annual convention of the Section of Public Utility Law of the American Bar Association at Kansas City, Missouri, on September 28, 1937

The Interstate Commerce Commission after Fifty Years

By ELMER A. SMITH*

THE very exemplar of administrative tribunals in this country has been and is today the Interstate Commerce Commission. Many of the states, prior to 1887, had established commissions charged with the duty of regulating railroad rates. But the establishment by Congress of the Interstate Commerce Commission was the first step by the Federal government in the regulation of business and industry through the administrative process.

The original Act to Regulate Commerce was approved on February 4, 1887.[1] The first meeting of the members of the Interstate Commerce Commission took place on March 31, 1887. On April 5, 1887, the provisions of the act became fully effective. Thus began the growth of public utility law and of administrative law in this country. They both have their font and source in the decisions of administrative tribunals. It seems only fitting, therefore, that this section, a section given over to the study of public utility law, give some recognition to the completion by the Interstate Commerce Commission of fifty years of service.

The statement was made at the exercises in Washington commemorating the golden anniversary of the establishment of the commission[2] that if the record of the commission had not commanded general respect, it is certain that additional administrative tribunals modeled largely upon the Interstate Commerce Commission would not have been set up by Congress from time to time to deal with activities in other fields. The Federal statute books are filled with acts that have been passed by Congress in recent years establishing other administrative tribunals for the regulation of interstate commerce. Even the most casual examination of these acts will show the extent to which these tribunals have been patterned after the Interstate Commerce Commission.[3]

IT will be my purpose in this paper to point out some of the reasons for the prestige that the commission now possesses and the respect in which it is held. As Professor Sharfman has recently said,[4] there can be little question that the commission, charged by an extensive and many-sided congressional charter with protecting and promoting the public interest in the sphere of transportation, has long been and remains today the outstanding agency of economic control in our governmental establishment.

A great many tributes have been paid to the commission in the last few years by thoughtful and impartial students and writers.[5] The reasons here given for the respect in which the commission is held are, however, those that most readily occur to practitioners before the commission, whose daily work keeps them in contact with the commission and its activities, who follow in par-

*Chairman of the Section of Public Utility Law.

ticular cases the administrative processes of the commission, who observe the commission's approach to the difficult questions that come before it, and who see in the printed decisions of the commission as they come out the application to the facts that the commission makes of the law controlling its discretion.

THERE is first the independence that has characterized the commission in its activities during the fifty years of its existence. Respect both for administrative tribunals and for courts is conditional upon their independence. It must be remembered that the commission has been engaged to a very substantial extent in deciding controversies between adversary parties. And parties to a controversy soon lose their respect for the tribunal deciding their controversy if that tribunal is not an independent one. Those who submit their complaints to the commission know that they will be decided by the commission and by no one else. They know that the commission recognizes that the standards laid down for the control of its discretion are found within the four corners of the Interstate Commerce Act and in no other place.

The Supreme Court, in speaking of the Federal Trade Commission, recently said:[6]

> The commission is to be nonpartisan; and it must, from the very nature of its duties, act with entire impartiality. It is charged with the enforcement of no policy, except the policy of the law. Its duties are neither political nor executive, but predominantly quasi judicial and quasi legislative. Like the Interstate Commerce Commission, its members are called upon to exercise the trained judgment of a body of experts "appointed by law and informed by experience." Illinois C. R. Co. *v.* Interstate Commerce Commission (1907) 206 U. S. 441, 454, 51 L. ed. 1128; Standard Oil Co. *v.* United States (1931) 283 U. S. 235, 238, 75 L. ed. 999.

This is likewise true of the Interstate Commerce Commission. That commission recognizes that it is charged with the enforcement of no policy except the policy of the law as found in the Interstate Commerce Act. The Supreme Court a good many years ago said[7] that from whatever standpoint the powers of the Interstate Commerce Commission may be viewed, they touch many interests, they have many consequences, and they are expected to be exercised in the coldest neutrality. That this has been and is the aim of the Interstate Commerce Commission, no one familiar with its work can doubt.

IT has recently been suggested that the commission should be placed within a department of the government.[8] But such a proposal ignores the fact that the commission is not an arm of the Executive, but is primarily and fundamentally an arm of Congress, carrying out the duties and obligations imposed upon Congress by the Constitution of regulating interstate commerce.[9] We do not believe that it is putting it too strongly to say that the continued expansion of the rule of law through the administrative process in this country depends to a very substantial extent upon the continued independence of an administrative tribunal such as the Interstate Commerce Commission. The bill last introduced in Congress providing for the reorganization of the agencies of the government recognizes that a tribunal such as the Interstate Commerce Commission should be independent.[10]

Then there are the qualities of impartiality and openmindedness that characterize the approach of the commission to the controversies before it and to the disputes that arise under the act between those who pay and those who serve. There are no headlines by the commission before a case is heard, of what the commission proposes to do, and the results it seeks to obtain. There is no criticism if one of the parties to a case concludes to appeal from the commission's decision to the court. Parties appear before the commission not to oppose the conclusions reached by the commission without a hearing, but to supply the commission with such facts as will enable the commission to decide a case intelligently and fairly.

ANOTHER principle that the commission has recognized and that has added to its reputation and standing is that the law vests in it the power of regulating the railroads and not of managing them. As Professor Sharfman well puts it,[11] under the administration of the Interstate Commerce Act by the commission, the essence of private control and enterprise has been maintained, despite the extensiveness of public control. The commission has said time and time again[12] that it is not the manager of the railroads. It is concerned with the regulation under the law and not with management as an owner. We do not mean to suggest that a case does not now and then arise in which the railroads believe that the commission has overstepped the bounds of regulation and has become a manager. An example is the commission's recent decision involving passenger fares in the eastern territory,[13] in which it required a reduction in passenger fares on the ground, among others, that a reduction in fares would increase revenues.

The practice of the commission in writing reasoned opinions, in which the commission sets forth the facts upon which it has acted and the considerations that controlled the discretion that it possesses under the law, has been an important factor in the establishment of the commission's reputation. Its failure to write a reasoned opinion in a controverted case would of course savor of arbitrary action, and this the commission has avoided. The Supreme Court in emphasizing the necessity of this practice has recently said:[14]

> Complete statements by the commission showing the grounds upon which its determinations rest are quite as necessary as are opinions of lower courts setting forth the reasons on which they base their decisions in cases analogous to this . . . we have recently emphasized the duty of such courts fully to state the grounds upon which they act. . . .

THE patience and consideration with which the commission listens to those who appear before it cannot fail but command respect. Perhaps in some instances the records before the commission are too long. Perhaps witnesses sometimes talk too much. But it is believed that on the whole it is better that the commission should have too many facts before it rather than too few. And it is the part of wisdom that the commission should err, if at all, on the side of liberality in listening to facts which the parties to a case consider relevant and material. The Supreme Court has said[15] that facts and circumstances which ought to be considered by an administrative tribunal must not be excluded. The fact must not be forgotten that the right that a party has to appear before an administrative tribunal such as the commission, and to set forth the facts relating to his case, is in itself a kind of safety valve.

Those who appear before the commission know, moreover, that whomever they may represent, that whatever interests may be in their keeping, whether those interests be large or small, they will be given a full and fair hearing before the commission. The parties to a case before the commission know that it will be guided in its determination by the evidence adduced at open hearings, that they will have an opportunity not only of offering their own testimony but of refuting that offered by others. The commission has recognized the principle so often announced by the Supreme Court that one who decides shall be bound in good conscience to consider the evidence, to be guided by that alone, and to reach his conclusion uninfluenced by extraneous considerations which in other fields might have play in determining purely executive action.[16] Students of the law respect the commission for its adherence to the fundamental requirements of due process. In this connection the remarks of Mr. Justice Stone at the Harvard Conference on the Future of the Common Law deserve quotation:[17]

> Looking back over the fifty years which have passed since the establishment of the Interstate Commerce Commission, no one can now seriously doubt the possibility of establishing an administrative system which can be made to satisfy and harmonize the

requirements of due process and the common law ideal of supremacy of law, on the one hand, and the demand, on the other, that government be afforded a needed means to function, freed from the necessity of strict conformity to the traditional procedure of the courts.

Here is an achievement that deserves high praise, and certainly no one is in a better position to understand the full measure and extent of this achievement than those who in their daily work before the commission observe this common law ideal of the supremacy of the law.

PROFESSOR Frankfurter in a recent article[18] said that new conflicts and new types of controversies have arisen, but too vast and too delicate to be left to uncontrolled political decisions or to judgments appropriate to isolated instances, that to these new controversies the core of the law is appropriate and the subjection of the individual interest to some uniformity and its reference to some standard of judgment.

Now the Interstate Commerce Commission has shown that it is possible to take some of these new conflicts and new types of controversies, which are but the reflection of the interdependency of men in an age of specialization, and subject them to some uniformity and standard, and what is more, to deal with and decide those controversies in such a way as to cause the parties thereto to respect the commission and to accept its decisions as final. Students of the law are prone to overlook the fact that the vast majority of the commission's decisions dispose of the controversy and that only a handful of the commission's orders ever reach the courts. Not half enough attention is paid to the intra-administrative law that the commission is building up without any control or review by the courts. But the tide has now turned, as shown by the studies that are being made of the commission itself and of its administrative process.[19]

SIR William Holdsworth recently said[20] that the maintenance of the supremacy of the law over all persons and causes is the first condition precedent for a stable government, and indeed for any sort of a civilized life. We only need to look in the world around us to realize how true this is. Certainly the commission in its administration of the Interstate Commerce Act has made a real contribution to the supremacy of the law in these newer types of conflicts and controversies. It has recently been said[21] that in a measure at least the administrative functions and the administrative processes may prove the solution of the problem that now faces democracy. It is not too much to say that the commission as a result of the manner in which it has administered the Interstate Commerce Act over this period of fifty years, has made itself a fundamental part of the democratic way of life in which the rule of law obtains over economic force and disorder.

It is not intended here to suggest that the commission as a body appointed by law and informed by experience has achieved a certain and an absolute accuracy of result, a sort of infallibility in dealing with the baffling questions that come before it. The commission is no more immune from criticism than the courts, although that criticism ought to be fair, honest, and intelligent. The commission is part and parcel of a complicated social, economic, and governmental order. It can no more overlook the world around it than the courts themselves, although it is to be borne in mind at the same time that its duties and discretion are controlled not by the opinion of the fleeting moment, not by the pressure groups, but by the law. It is believed, however, that so far as human frailty permits, the commission as shown by what it does and the manner in which it does it, acts fairly and impartially in the controversies that come before it, controversies that are hardly less important because they involve the purses and not the personal liberties of men.

MR. Commissioner Eastman recently said[22] that in a public body the

size of the Interstate Commerce Commission, a very large part of the work is done and must be done by the employees, and he expressed the wish that they could in some way be given greater recognition. One reason for the respect in which the commission is held is the manner in which the commission's work is carried on by the members of its staff. The ideals and the standards that have governed the commission in all these years are as much the ideals and standards of its staff, and those familiar with the work and the varied activities of the commission must recognize the general character and effectiveness of the internal administrative organization that the Interstate Commerce Commission has built up during its life of fifty years.[24]

The question may be asked whether there has not been a tendency on the part of the commission in its aim and purpose to act fairly and impartially in the cases that come before it, to turn itself into a judicial body, with perhaps an inclination to devote its time to matters which do not go to the heart of the case before it. It only requires, however, a study of the commission's decisions and an actual contact with proceedings before it to understand that the commission retains after fifty years the flexibility of the administrative process and the ideals of the first chairman, Judge Thomas M. Cooley, who had the vision to understand that proceedings before the commission require simplicity and not complexity in procedure, and that nothing should stand in the way of the commission's efforts to get at the facts in a given situation as directly and as speedily as possible.[24]

NOR has the commission overlooked the fact that it always has presented to it in a controversial case not only the rights of the parties actually before it, but the interests of the public. The commission has said[25] that it must stand for the entire public, including the railroads, that it cannot accede to the mere wishes of any class, that it must recognize the just demands of all classes and it must have in mind those who do not appear as well as those who are represented before it. The commission has followed the principle[26] that the interests of the public cannot go by default in any proceeding before the commission, that they must be considered as fully as those of the parties, that unlike the decision of a court which ordinarily is conclusive only of the rights of the interested parties, the report and order of the commission prescribing rates must affect many who are not directly represented before it.

What of the future of the commission? Will it be able in the coming years to maintain the high position and standing it has attained? In seeking answers to these questions many considerations must be borne in mind.

The problems that are now coming before the commission and that will continue to come are not only new but novel. Its concern up to the present time has been largely the regulation of one agency of transportation and the relation between that agency and those who use it.

BUT the rise of newer agencies of transportation, the motor vehicle, the airplane, and the revival of an old one, the boat and the barge, bring problems before the commission of the most difficult kind. The commission is now regulating not only one agency of transportation but several different agencies of transportation, all competing with one another. As the Brookings Institution, in a recent report dealing with the various agencies of the government, put it:[27]

> The commission deals with vast problems of economics which involve the establishment of business relationships, the harmonizing of conflicting interests, the establishment of reasonable and fair business practices, the determination of financial policies, and the establishment and harmonizing of social and economic policies, and finally acts as an agency attempting to enforce regulated competition.

The commission has recently been given jurisdiction over the regulation of motor vehicles engaged in interstate

commerce.[28] Bills are now pending in Congress enlarging the jurisdiction that the commission possesses over carriers by water and giving the commission jurisdiction over carriers by air. The Brookings Institution in the report referred to proposes that there be a reallocation of the regulatory functions of various government bureaus and bodies, calling in most cases for the concentration of regulatory activity in the Interstate Commerce Commission. It may reasonably be expected that within the next few years the commission will be given jurisdiction over all agencies of transportation engaged in interstate commerce, whether by land, by water, or by air. Any such extension of the commission's jurisdiction will, along with the extension of the commission's jurisdiction over motor vehicles engaged in interstate commerce, give rise to problems undreamed of a decade and a half ago.

THE amendments made in 1933 and 1935 to the Federal Bankruptcy Act, imposing upon the commission large duties and responsibilities in connection with the reorganization of insolvent railroad corporations, may be taken as an indication of the respect in which the commission is held by Congress. These acts have very greatly added to the work of the commission.

There is, morever, a decided tendency on the part of Congress to entrust to the commission the duty of passing upon controversies between various branches of the government and the citizens of that same government. The commission is now by law authorized to fix the rates that the railroads charge the Post Office Department for the transportation of mail,[29] and the commission has done so.[30] The commission has more recently been empowered to fix a fair and reasonable rate of compensation for the transportation of air mail by airplane,[31] and it has already been called upon to exercise the power conferred upon it by this statute.[32]

Joint rates between the railroads and the Inland Waterways Corporation, operating boats and barges on the Mississippi river and its tributaries, the stock of which corporation is owned exclusively by the United States, are regulated by the Interstate Commerce Commission.[33]

The Bituminous Coal Act of 1937 specifically provides[34] that the coal commission or the consumers' counsel is vested with authority to make complaint to the Interstate Commerce Commission with respect to the rates and practices relating to the transportation of coal and to prosecute the same. Counsel for the Bituminous Coal Commission and the consumers' counsel have already appeared before the Interstate Commerce Commission in cases involving the rates on bituminous coal.

PUBLIC Resolution No. 69, recently approved by the President,[35] expresses the views of Congress respecting a program for the relief and benefit of agriculture. This resolution provides that it is the sense of Congress that permanent farm legislation should include provision for application to the commission

> for a correction of discrimination now existing against agricultural products in the freight rate schedules.

A bill introduced in the House of Representatives at the last session[36] specifically authorizes the Secretary of Agriculture to make complaint to the Interstate Commerce Commission with respect to rates and practices relating to the transportation of any farm products and to prosecute the same. It further provides that before proceeding to hear and dispose of any complaint filed by any person other than the Secretary, involving the transportation of farm products, the commission shall cause the Secretary to be notified of the proceeding, and upon application to the Secretary shall permit the Secretary to appear and be heard.

It will hardly be denied that vesting government tribunals and government departments which are under the control of the Executive with the power to

file complaints before the Interstate Commerce Commission respecting freight rates and to intervene in cases before that tribunal, raises problems hardly thought of when the Interstate Commerce Act was passed. There may be some serious doubt respecting the advisability and wisdom of having the government through counsel appear before an independent administrative tribunal such as the commission as a special pleader for a special group. Perhaps another way of looking at it would be to consider counsel for the government in such a case as a sort of people's counsel.

However that may be, the passage of these acts does give emphasis to the respect in which the commission is held by Congress itself, and the apparent belief of Congress that the commission will fairly and impartially pass upon the complaints brought by officers of the government itself against citizens of that government. Here is a development in the rule of law in a world of complicated social and economic relationships that is of more than passing significance.

It seems clear that the new questions that are coming before the commission and that will continue to come before it will add immeasurably to its burdens and responsibilities. No man has the gift of prophecy and no man would be rash enough today to peer very far into the future. But with the continued independence of the commission, with the traditions that it has gathered to itself over this half century, and with an informed public opinion behind it, supporting it, criticizing it when the criticism is believed justified, we may expect the commission in its consideration of these new questions to bring to them the same qualities that have earned for the commission during its life of fifty years the respect of those who know it and its work. We may expect the commission to measure up to the increased responsibilities that will continue to be placed upon it as long as we are governed in this country by the rule of law.

Citations

[1] 24 Stat. L. 379.

[2] Exercises Commemorating the Fifty Years' Service of the Interstate Commerce Commission, April 1, 1937, Departmental Auditorium, Washington, D. C., address by Mr. Allan P. Matthew, Government Printing Office, 1937.

[3] Acts of Congress: Federal Trade Commission Act, Act of Sept. 26, 1914, 15 USCA, § 41; Packers and Stock Yards Act, Act of August 15, 1921, 7 USCA, § 181; Securities Act of 1933, Act of May 27, 1933, 15 USCA, § 77a; Securities Exchange Act, Act of June 6, 1934, 15 USCA, § 776; Federal Communications Act, Act of June 19, 1934, 47 USCA, § 151; National Labor Relations Act, Act of July 5, 1935, 29 USCA, § 151; Federal Power Act, Act of August 26, 1935, 16 USCA, § 791; Merchant Marine Act of 1936, Act of June 29, 1936, 46 USCA, § 1111; Bituminous Coal Act of 1937, Act of April 26, 1937, 15 USCA, § 828.

[4] Sharfman: The Interstate Commerce Commission: An Appraisal, 46 Yale L. J. 915.

[5] Blachly and Oatman: Administrative Legislation and Adjudication, 268-269; Report of Special Committee of American Bar Association on Administrative Law, 59 A. B. A. Repts. 550; Reports of the Select Committee to Investigate the Executive Agencies of the Government, Nos. 10 and 12, prepared by the Brookings Institution.

[6] Humphrey *v.* United States (1935) 295 U. S. 602, 624, 79 L. ed. 1611.

[7] Interstate Commerce Commission *v.* Chicago R. I. & P. R. Co. (1910) 218 U. S. 88, 102, 54 L. ed. 946.

[8] Report of the President's Committee on Administrative Management. See, also, "The Problem of the Independent Regulatory Commissions," by R. E. Cushman, Government Printing Office, 1937.

[9] Humphrey *v.* United States, *supra.*

[10] S. 2970, introduced in the Senate by Senator Byrnes on Aug. 16, 1937.

[11] Sharfman: The Interstate Commerce Commission: An Appraisal, 46 Yale L. J. 915.

[12] Revenues in Western District (1926) 113 Inters. Com. Rep. 3; *Re* Container Service (1931) 173 Inters. Com. Rep. 377, 445; *Re* Fifteen Per Cent Case (1931) 178 Inters. Com. Rep. 539, 576; Banton *v.* Belt Line R. Corp. (1925) 268 U. S. 413, 421, P.U.R. 1926A, 317; Atchison T. & S. F. R. Co. *v.* United States (1932) 284 U. S. 248, 262, 76 L. ed. 273.

[13] *Re* Passenger Fares and Surcharges (1936) 214 Inters. Com. Rep. 174, 227. The commission said in this case: ". . . if in our judgment it is made to appear that, by a change . . . in fares, the passenger service . . . can lawfully be made more profitable than it is, and thus to that extent lift a part or all of the extraordinary burden now resting upon the freight service by reason of the unprofitable nature of the passenger service, it would seem to be our duty under § 1 of the act and in the light of § 15a, to require such change or changes."

[14] Beaumont, S. L. & W. R. Co. *v.* United States (1930) 282 U. S. 74, 86, 75 L. ed. 221. See also Florida *v.* United States (1931) 282 U. S. 194, 75 L. ed. 291; United States *v.* Chicago, M. St. P. & P. R. Co. (1935) 294 U. S. 499, 509, 79 L. ed. 1023.

[15] Morgan *v.* United States (1936) 298 U. S. 468, 480, 80 L. ed. 1288.

[16] United States *v.* Baltimore & O. S. W. R. Co. (1912) 226 U. S. 14, 57 L. ed. 104; Interstate Commerce Commission *v.* Louisville & N. R. Co. (1913) 227 U. S. 88, 90, 57 L. ed. 431; Spiller *v.* Atchison T. & S. F. R. Co. (1920) 253 U. S. 117, 132, 64 L. ed. 810; Morgan *v.* United States, *supra*.

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[25] *Re* Advances in Rates—Eastern Case (1911) 20 Inters. Com. Rep. 243, 250.

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[30] *Re* Railway-Mail Pay (1919) 56 Inters. Com. Rep. 1.

[31] Air Mail Act of June 12, 1934, as amended by Act of Aug. 14, 1935, 39 USCA, 469-(d).

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The Structure and Regulation of Interstate Telephone Rates

By CARL I. WHEAT*

MEASURED on the long scale of human development, the growth of present-day nation-wide communication networks and the revolution in social organization which has accompanied that growth appear as processes of almost incredible swiftness. Many a man still active grew to manhood before the telephone was conceived; a few yet live who were born before the invention of the telegraph, and only the school children can fail to recall that sudden, rather disconcerting onslaught of radio broadcasting upon the peace and quietude of the American home, scarcely a decade ago. Yet despite this absence of any aura of antiquity, and despite the swiftness with which these astonishing developments have crowded upon us, it

*Telephone Rate Counsel and Director of the Telephone Rate and Research Department, Federal Communications Commission.

is not too much to say that the complex social and industrial structure of modern society is very largely built upon and around man's new-found facilities for communication over distances far greater than the range of the human voice. Eliminate these instrumentalities and civilization as our generation knows it would suffer immediate and material alteration.

Scarcely sixty years have passed since the first crude telephone instrument was constructed. Yet today human speech throughout the world overcomes the obstacle of space by means of some thirty million telephones, more than half of which are concentrated in the United States. (Not in vain was it long ago said that the Yankee is peculiarly invested with "the gift of gab"!) The social import of this astonishing national telephonic nerve system can scarcely be exaggerated, for it not only serves the centers of population, but it reaches every isolated hamlet wherever located; it spans mountains and deserts, rivers and plains; it acts as the medium for more than eighty million separate telephone conversations *per day,* or some twenty-four billion each year, and it represents an investment in this country alone of almost six thousand millions of dollars.

Less than two years after Alexander Graham Bell patented his little talking gadget in 1876, the first telephone "exchange" was opened in New Haven, Connecticut, with twenty-one connected instruments. It was often said of the early transmitters that they were better adapted for training the lungs and the vocal cords than they were for efficient communication, but in spite of many apparent difficulties, Dr. Bell and his associates possessed from the outset an unbounded faith in the future of the invention. That this faith was shared by their lawyers is disclosed by the following paragraph from the original 1885 Articles of Incorporation of the American Telephone and Telegraph Company:

> . . . it is further declared and certified that the general route of the lines of this association, in addition to those hereinbefore described or designated, will connect one or more points in each and every city, town, or place in the state of New York with one or more points in each and every other city, town, or place in said state, and in each and every other of United States, and in Canada and Mexico, and each and every other of said cities, towns, and places is to be connected with each and every other city, town, or place in said states and countries, and also by cable and other appropriate means with the rest of the known world as may hereafter become necessary or desirable in conducting the business of this association.

Just why the drafters of this document limited the scope of the company's proposed operations to the "known world" is not apparent. At any rate, their almost unlimited confidence in the telephone has been more than justified by the event. Technical obstacles were vigorously and successfully attacked, both by the Bell interests and by independent inventors and manufacturers; more efficient transmitters and receivers were soon developed; loading coils and repeaters were introduced upon the circuits; hard-drawn copper wire made its appearance—and gradually the transmission of intelligible conversation became possible over longer and longer distances. By 1890 Washington, New York, and Boston were linked by telephone, and Chicago was reached only two years later. The perfection of the electron tube (now generally familiar because of its universal use in radio reception) finally made possible successful voice transmission across the country, and no doubt a number here present can recall the thrill they experienced when, through an ear phone at San Francisco's 1915 Panama Pacific Exposition, they heard the thunder of the Atlantic surf, spanning the continent over the newly constructed lines of the "Bell Telephone System."

Incidentally, that system did not attain its present dominant position in the American telephone industry without a struggle. During the earliest years it was the patent lawyers who took most of the profits, and it is said that at one time Dr. Bell and his associates became sufficiently discouraged to offer their

whole shebang—lock, stock, and barrel—to the then all-powerful Western Union Telegraph Company for a paltry hundred thousand dollars. (Fortunately for them the offer was rudely rejected, and in 1909 the Bell people actually swallowed up Western Union—a situation which continued until divorce of the systems was accomplished four years later, in deference to the antitrust acts.)

WHEN the basic patents ran out, would-be competitors sprang up on every side, and a mad scramble for the profits of speech transmission ensued. But the Bell group had devised an effective "licensing" method which gave them a decided advantage, and this, plus control of most of the "long-distance" business and of the major manufacturing facilities, finally turned the tide. Through the possession of options to purchase, which had generally been included in the first "short-term licenses," and through the acquisition of stock in licensee companies, either in exchange for so-called "permanent licenses" or by outright purchase, the Bell interests found themselves, by the turn of the century, distinctly in the ascendency. They have never since been effectively challenged, and the so-called "Bell System's" organization of parent and associated companies, with complete manufacturing and research branches, has proved singularly effective from the business point of view, and has apparently been elastic enough to meet all emergencies. Today "Mother Bell" in New York holds the reins with what, from the outside, seems to be a firm hand, and a steady one.

The telephone business was, of course, early recognized as an interesting newcomer in that group of private enterprises which the law has designated as "affected with a public interest." Franchises to use city streets for poles and wires were essential from the outset, and problems of rates and service were not long in presenting themselves to local authorities. As the wire systems grew the various state regulatory commissions found themselves more and more entangled in these highly complex matters, and a large body of court and commission decisions has been built up around the telephone.

ODDLY enough, in view of the importance of "long-distance" communication between communities, the attention of the regulatory authorities has from the outset been largely directed to the problems of local or "exchange" telephone service. Seldom has any state commission concerned itself with toll or "long-distance" rates, and in practically no instance has any such body considered analytically the basic philosophy which underlies the toll rate structure.

On the interstate side, where only toll or "long-distance" service is involved, the rate problem has been given even less attention. Although, as early as 1887, interstate railroad rates were brought under public scrutiny, it was not until 1910 that interstate telephone operations were made the subject of legislative action. In that year certain limited powers over interstate telephone business were vested in the Interstate Commerce Commission, and in 1913 that body issued its uniform system of accounts for telephone companies—a system largely followed by the state commissions for intrastate telephone accounting. A few years later the matter of telephone company depreciation practices was included in the "Transportation Act, 1920," and much effort was put forth by the Interstate Commerce Commission in the direction indicated by that act. This effort remained largely incomplete and inconclusive, however, when, in 1934, the newly created Federal Communications Commission took over the former Interstate Commerce Commission jurisdiction over telephone matters. In that year, for the first time, a definite and comprehensive scheme of telephone rate and service regulation was set up for interstate application.

DURING the first three years of its operations, the telephone division of the Federal Communications Com-

mission was largely occupied with questions of jurisdiction over specific telephone companies, of approving proposed expansion of facilities and service, and like problems, together with the carrying forward of a nation-wide telephone investigation under Public Resolution No. 8 of the Seventy-fourth Congress, an effort now being brought to its conclusion. It was not until the current year, 1937, that the highly important and highly technical problem of interstate telephone rates was given its first truly concrete attention in this country.

This action followed the successful termination of a series of informal negotiations initiated by the commission with the American Telephone and Telegraph Company, which resulted last December in the joint announcement of a reduction in interstate toll rates aggregating twelve million dollars to the public on an annual basis. This important rate reduction went into effect on the so-called "Long Lines" of that carrier on January 15, 1937. In order that its effects might be studied, and to the end that the underlying problems of the commission's responsibilities in respect to interstate telephone rates might be concretely attacked, the commission thereupon established a telephone rate and research department, funds to carry on whose work until July 1, 1938, were provided out of the appropriation made by Congress for the conclusion of the general telephone investigation. It is with the work and problems of this department that this paper is largely concerned, and much of what I shall have to say today must, of course, be understood as an expression of my own personal views only, and in no sense as a commitment of the commission.

BEFORE touching upon these problems in detail, permit me to point out that the interests of utility ratepayers and of the enterprises which serve them are fundamentally identical. Service of high quality at rates fair and reasonable to both should be the common end. A utility which does not receive revenues sufficient to maintain its properties and credit upon a proper level cannot long continue to render reasonable or adequate service to its consumers, or to expand that service to meet new demands. Conversely, if the consumers are charged amounts greater than sufficient to accomplish these ends, they will not only be unfairly burdened from the legal point of view, but the development of the business and the expansion of service to new consumers, with consequent reductions in relative costs and—in the normal case—in rates, will be delayed, if not precluded. The investigation of any public utility rate structure must therefore consist of two distinct parts—first, the ascertainment of general over-all revenue requirements, and second, the selection of those kinds and types of rates within the general structure which will not only be reasonable and nondiscriminatory between classes of consumers, but which, when applied, will bring in the needed total revenue, and will make for constant expansion of the service and more and more efficient use of the plant devoted to that service.

THIS twofold nature of the rate problem has been recognized by the commission in the organization of the telephone rate and research group. And it has further been particularly recognized that "regulation by explosion," made up of long periods of inactivity on the part of regulatory authorities, combined with infrequent, but usually violent, outbursts of formal rate cases and resultant litigation, represents a method which furthers neither the interests of the ratepayers nor of the utilities which serve them. Emphatically, the problem is one which demands constant and continuous attention if it is to be properly attacked. It is the responsibility of the newly organized rate group of the Communications Commission to devise the necessary machinery by which the results of interstate telephone operations may be followed readily and continuously, month by month. The accurate and always up-to-date knowledge of

operations thus obtained affords the basis for frequent discussion of individual problems with company officials and with state regulatory commissions, to the end that the interstate rate structure may be constantly adapted and adjusted to the needs of both the users of "long-distance" service and the organisms which serve them.

The Nature of Telephone Toll Rates

It may be well at this point to consider briefly the essential nature of telephone rates. "Exchange" or local rates have usually consisted of flat monthly charges for either a limited or unlimited number of connections between a given subscriber's telephone station and other telephone stations within the particular area, or "exchange," in which he happens to be located. These rates ordinarily differ in amount for residential as contrasted with business service, as well as for single party service as contrasted with two or more party service on individual circuits. In certain instances the charges are measured by the number of messages used, but the flat rate system of exchange charges is common and basic.

Charges for toll, or "long-distance," service, however, have in practically all instances been established on the basis of the individual message, since the flat-rate method is not adapted to such service and if generally applied to it would necessarily result in waste of the service, in greatly increased over-all costs, and in rates necessarily so high as to meet the demands of only very large-scale users. It has also been universally recognized that telephone toll rates cannot successfully be based upon the particular costs involved in transmitting messages over particular routes. If a company were operating "long-distance" service between a single pair of termini only, the cost of rendering that service would, of course, define the charge required for each individual message over the line. But the problem is never so simple, and when a large number of points are served the question of separating joint costs between the various circuits soon becomes so intricate as to be largely insolvable. An averaging process is therefore essential, charges over any particular route and distance being ordinarily the same as for messages over similar distances on any of the other routes served, regardless of the particular costs involved in each individual message or over each individual route. The availability of "long-distance" service to patrons on little-used routes is thus vastly broadened, without unduly burdening any particular group or class of potential consumers.

Obviously it costs a great deal more *per message* to render toll service over a route which enjoys only two messages per day than it does over one which accommodates two thousand messages in the same period. But where there are many such lines of varying patronage, if the sum of the individual message charges is sufficient to meet the total revenue needs of the utility for rendering the over-all service, the problem resolves itself solely into one of establishing those individual message charges which will best meet the varying requirements of the patrons of the service, without undue burden on the facilities used in favor of any particular group of consumers.

This is accomplished by a process known as "classification," and a classified telephone message toll rate schedule recognizes that different consumers of the service have many differing requirements. It attempts to meet such requirements through rates which will attract as many classes of potential consumers as possible, consistent with efficient over-all use of the company's facilities. Thus, the service is primarily divided into "station-to-station" and "person-to-person" messages, the former requiring the connection of a particular telephone line only, and the latter requiring connection with a selected person at the called end of the line. Since "person-to-person" operation is naturally the more costly, the rates assessed for such service are ordinarily fixed on a higher level than are those for "station-to-station"

service. And for like reason the charge for use of a toll line for a longer period of time is ordinarily higher than for use for a shorter period, some selected number of minutes—commonly three or five—being ordinarily adopted for minimum rate quotation. In both of these instances the so-called "value of service" factor is also a consideration in determining the rate.

MOREOVER, since efficient use of the plant demands the elimination, so far as possible, of idle or off-peak periods, usage of the service at night or on Sundays, when ordinary business use is at a minimum, is usually invited through a reduction in rates during such periods. Here the problem becomes one of so devising the rate differentials as to attract as much business as possible consistent with efficient operation of the plant, and with the avoidance of special engineering and resultant increased overheads solely on account of such secondary service.

Classification resolves itself, therefore, into a complex process of averaging—a process based first upon distance; second, upon the length of time that the facilities are used; third, upon the type of call, whether to a selected person or merely to a particular telephone station; and fourth, upon the time of day when the call is made. It is evident that, on a telephone system which serves thousands of individual points, separated by from one to thousands of miles, such a classification involves literally billions of individual potential services. A schedule of rates which properly reflects such diversity in requirements is necessarily a complicated structure, and is not the product of a day nor of any one mind. It is the result of many years of trial and error, and there have been numerous elements of classification and many varying types of services which have at times been in force in the past, but which have proved unsatisfactory either to the patrons of the service or to the companies which were furnishing it, and which have therefore been eliminated.

THIS is not to say that the existing classifications are by any means perfect. Although numerous changes in both rates and practices have been made during recent years, there remain today no less than eighteen distinct rate schedules in force on the toll lines of the "Bell System." Many variations in practices and rate levels remain to be considered and compared, and these problems are decidedly of a continuing nature. Moreover, concrete criteria must be developed by which to judge the propriety of the differentials between "person-to-person" and "station-to-station" rates at varying distances, as well as the propriety of the differentials between night and day rates. The question of proper rates for "overtime" service beyond the time limits for which basic rates are today quoted is one which requires particular attention. Constant study must be made of the propriety of various rate steps on each given schedule; of the appropriate distances between such rate steps, and of the relations between them on the various schedules. And the matter of new forms of service demanded by new or differing public requirements must receive day-by-day study by students of the subject. These are essentially "spread-of-rate" problems, and the public is vitally interested in the manner of their solution.

In this connection, the telephone rate and research group has just completed for general distribution a preliminary outline of the fundamental elements of the telephone toll rate structure, as it has been developed on the "Bell System."

IT may be of interest in this connection that, while the literature on railroad rate making is extensive, and although much can be found in the books and periodicals on the principles involved in establishing gas and electric rates, as well as those of many other types of utilities, this is apparently the first time that even an elementary analysis of these telephone toll rate problems has been made available, outside of the private files of the "Bell Telephone Sys-

tem." Quite naturally, the report does not attempt to bind the commission to any particular view on any of the many questions discussed. It is expository only, and has been prepared largely to provide some concrete basis upon which the examination of these questions may be developed in the future by the representatives of the public. Only as a result of such examination can these questions of detailed rate classification be fairly evaluated and their public implications be properly determined.

Obviously, however, the interstate telephone toll rate problem is not solely, or even primarily, made up of these questions of detail. In common with other utility rate studies, the matters of so-called "valuation"; of the propriety of "book" figures and of "reproduction cost" in dealing with "rate-base" development; of depreciation, both accrued and accruing, and of the proper "rate of return," as well as of many other factors of like character, must be met in the field of telephone rates. Moreover, the peculiarities of the telephone business require studies leading to the separation or segregation of plant and of revenues and expenses properly allocable to exchange as contrasted with toll service, and to interstate toll service as contrasted with that which is intrastate. And finally, the nature of the "Bell System" organization makes necessary the examination of such elements as manufacturing costs and selling prices, particularly those of the "Bell"-owned Western Electric Company, as well as the asserted costs involved in so-called "License Contract" services rendered by the parent corporation to its associated and subsidiary companies. The nature of the factors involved in a study of this threefold group of problems can be hinted only in rough outline in the time allotted for this paper, but it is essential to develop their basic characteristics, if the work now being undertaken by the Communications Commission is to be properly oriented in the general picture of public utility regulation in this country.

The Scope and Structure of the "Bell Telephone System"

A CONCENTRATION of physical assets exceeding in book value five billion dollars in the hands of a single private enterprise would challenge public attention in any country and at any time, whatever the nature of the undertaking. And control by such an enterprise of the major communication network of such a nation as the United States could not fail to result in widespread public concern in its operations. Although there are over six thousand separate telephone companies in operation in this country today, the "Bell Telephone System" not only constitutes the largest single private corporate enterprise in history, with combined book assets totaling well over five-billion dollars, but its unified ownership and control of the country's telephone facilities extends today to no less than 94 per cent of all telephone plant, with a combined wire mileage of over eighty million miles, enough to provide more than a thousand 2-wire telephone circuits to the moon. The "Bell System" also operates practically the entire wire mileage of the country which is used in the transmission of interstate telephone messages, and by radio connection it spans both the Atlantic and Pacific oceans, and renders possible telephonic communication with practically every important nation of the world. Public concern in the operations of this vast corporate organism is therefore direct and obvious, and since interstate telephone lines necessarily form the arteries of chain radio broadcasting, while basic wire or cable transmission will apparently be essential to television, if that newest form of telecommunication is to be successful over more than limited areas, the control by this single organism of the major means and facilities for nation-wide communication becomes all the more significant from the public standpoint.

THE "Bell System," in the broad sense, comprises an aggregation of nearly two hundred separate corpora-

tions, all controlled directly or indirectly by the American Telephone and Telegraph Company, or in which the Bell group is interested through stock ownership. Of this total some 140 are telephone operating companies, and the remainder are generally devoted to manufacturing or to nontelephonic activities. The telephone industry in this country ranks third in magnitude among public utility enterprises, but apparently no other important field of utility operation is so completely dominated by a single holding corporation. In 1936 the "Bell System" directly owned and served almost fifteen million telephones, and it offered connection facilities with practically all of the three million other telephones served in this country by independent or connecting companies, as well as with over 90 per cent of all the telephones in use throughout the world. The "Bell System's" employees total some 315,000, and there are no less than 775,000 holders of "Bell System" securities, more than half of whom are women.

The corporate pyramid topped by the American Telephone and Telegraph Company has for its first layer beneath the summit the twenty-three so-called "Associated Companies," beneath which is a layer of eighty-five Bell controlled connecting companies. The next group comprises forty-four so-called "Bell Interest Companies," in which the Associated Companies hold slightly less than 50 per cent of the stock, and there are four affiliated companies which are engaged in international and foreign service.

ALTHOUGH they number almost six thousand, the "independent" telephone companies of the country are individually relatively unimportant in size, controlling as a group only some 16 per cent of the telephone stations of the United States. And as previously mentioned, over 90 per cent of the total investment represented by the American telephone industry is embraced in the "Bell" interests.

The Western Electric Company constitutes the manufacturing department of the "Bell System." It is jointly interested with the American Telephone and Telegraph Company in the Bell Telephone Laboratories, a corporation which pursues the development and improvement of the art of telephony in all its phases, and which has also been responsible for many important developments in nontelephonic fields. The Teletype Corporation is entirely controlled by Western Electric, and Electrical Research Products, Inc., commonly known as "ERPI," which handles such nontelephonic activities as motion pictures and picture sound transmission, is not only wholly owned by Western but itself has many subsidiaries. The Graybar Corporation is Western Electric's jobber for its large non-Bell business.

Stock in the twenty-three Associated Bell Operating Companies is owned by the American Telephone and Telegraph Company in proportions ranging from 65 to 100 per cent. During 1936 these companies enjoyed revenues in excess of $1,011,000,000, and their operating expenses totalled some $787,000,000. They gave employment in that year to approximately 260,000 persons.

WHILE the majority of these Associated Companies offer service in only a single state or a portion of a state, six of them blanket several states, and render both intrastate and interstate service within their particular areas. In two instances (those of the Pacific Telephone and Telegraph Company and the Mountain States Telephone and Telegraph Company) all intracompany service of an interstate character is rendered by the associated company, whereas in the areas served by the four others (the New England Telephone Company, the Southern Bell Telephone Company, the Northwestern Bell Telephone Company, and the Southwestern Bell Telephone Company) the "Long Lines" department of the American Telephone and Telegraph Company handles at least a part of the interstate business. In all instances, messages between areas served by different Associated Com-

panies are handled by "Long Lines." Of the country's total interstate telephone message business, the American Telephone and Telegraph Company, through its "Long Lines" department, handles directly some 75 per cent (measured by revenue), while the several Associated Companies account for almost the entire balance, only a very small amount of such business being done at the present time by non-Bell companies. And except for certain very short-haul "fringe" messages over a few state lines, the entire interstate business is concentrated on the "Long Lines" system and the systems of the six multi-state companies above mentioned.

OF course, this concentration of interstate telephone business and of corporate authority over it tends to simplify the work of the regulatory authority. But it also carries with it many problems of a highly important "social" nature. In effect, we find ourselves confronted with an almost complete monopoly of this business in the hands of an integrated corporate organization, and the test of interstate telephone regulation, as and when it really gets under way, will be whether it can satisfactorily fulfil the basic aim of acting as an efficient and effective substitute for competition in this field.

As stated above, aside from the details of actual rate structure, the Communications Commission's problems in the regulation of these interstate operations are threefold in nature—first, those which are common to public utility regulation in general; second, those which are peculiar to the telephone business; and third, those which stem from the special characteristics of the "Bell Telephone System." I shall broach only a few of these problems today.

Basic Problems of Utility Regulation—"Valuation"

AMONG the regulatory problems presented by the telephone in common with other forms of utility service, the foremost is of course that *bête-noir* of public utility regulation — so-called "Valuation." It would be out of place, indeed, for me to inflict upon this group today my rather heterodox views upon this subject. May I, however, pose a question: Who among you has ever heard of a successful and practical business man in the nonutility field girding up his loins, reaching for his pocketbook, and hiring a staff of engineers and lawyers to go through the elaborate hocus-pocus which, in the utility field, we solemnly term "valuation"? Furthermore, would any business man thereupon apply to the figure thus obtained some purely arbitrary percentage, called in the utility field "rate of return," for the purpose of ascertaining what earning level his business must attain in order to maintain its place in the sun? How long would such a fellow last in the practical and extremely cold-blooded world of business?

It may be said that the prices which ordinary businesses may charge are fixed by competition; and that, since regulation in the utility field is in a sense a substitute for competition, some such machinery as so-called "valuation" is essential in that field, in order that there may be some criterion on which to judge the propriety of rate levels. No one could quarrel with that position if only the selected criterion possessed some logical relation to the varying needs of these businesses.

BUT "valuation" practices have usually partaken more of the nature of horse-trading or of pure speculation than they have of fundamental business sense. After the circuses are over the participants are usually not a whit nearer a practical business solution of the problem than they were when the show commenced. Indeed, they are often so befuddled by the fog of hypothesis that any practical solution has long since become impossible. I sincerely trust that a contest on the subject of "valuation" may be avoided in the work in which I am now engaged. I am not unmindful of the many decisions of the courts upon this subject, and it may be that we shall eventually be forced

to set up our tents in this desert, but I cannot overlook the fact, as I see it, that "valuation," as it is commonly practiced, has little real place in the sober determination of the reasonable level of revenues to be allowed a public utility in order that it may properly sustain its credit and keep pace with the demands of its consumers. May I remind you that I have here referred solely to *the process of "valuation," as it has grown up,* in contradistinction to the fundamental concept of *"value,"* which I have made no attempt to discuss in this paper.

When asked when we are going to begin counting bricks and measuring wires as the foundation for a valuation of the telephone company's properties, I bethink me of the many vastly more pressing problems which are crowding upon us and am reminded of the man who was trying to teach a parrot to talk. Standing before the bird, he repeated for several minutes the words, "Hello, hello, hello!" The parrot was apparently wholly unimpressed. At last he opened one eye and gazed upon the man, and finally drowsily remarked, "Line's busy."

We are "ready, willing, and able" to enter this field of "valuation" if such action should become necessary, but we hope to avoid any such necessity, at least until opportunity has been had to complete the fundamental studies which we deem much more important at this time.

"Reproduction Cost"

WHAT I have said of "valuation" applies, of course, to its subfactor "reproduction cost." In order to make absolutely sure that there may be no slip twixt cup and lip we are now studying the broad trends of costs and prices on the elements of property used in the interstate telephone business. But we are not attempting to build up a vast, imaginary structure of hypothetical "reproduction cost" for these systems. And we do not expect to be forced to do so.

Rate of Return

THE problem of "rate of return" is also one which is common to all types of public utility rate investigation. Yet despite the thousands of utility rate cases in the books, and despite the vital import of this subject, very little has found its way into the decisions to offer concrete aid in the selection of the fair and proper "rate of return" to be applied in any concrete case.

Even minor variations in this return item are obviously equivalent to changes of large magnitude in "valuation." For example, an increase from 6 to 8 per cent in the allowed rate of return is equivalent to a difference of no less than 33⅓ per cent in the rate base. On a property valued at $100,000,000, a difference of one-half of one per cent in the allowed rate of return represents a difference of half a million cold, hard dollars in net earnings, and this amounts, on a 6 per cent return basis, to a variation in "valuation" of eight and a third millions of dollars. On the present net investment in the American Telephone and Telegraph Company's "Long Lines" plant, such a one-half of one per cent difference in rate of return would equal some $1,600,000 in annual revenue, an amount which, on a 6 per cent return basis, would represent a variation of no less than $27,000,000 in the so-called "value" of this system alone. This vital relation between the adopted rate of return and the matter of so-called "valuation" is often overlooked by utility officials, imbued as they frequently are with great zeal to obtain the last dollar of asserted "value" for their employers' properties.

The subject of "rate of return" has already been made the occasion of intensive study by the rate and research group, for we must discover the relation of its various factors to the practical questions that confront us. To spend time and energy on the abracadabra of "valuation" would appear futile in the face of pressing need for a more definite understanding of the cold business principles which are involved in this relationship between public utility service costs, credit stabilizing needs, and allowable profit.

Depreciation

THE problem of depreciation, from the expense angle, and also as a measure of the exhausted service capacity of the plant, has long presented and continues to present a serious stumbling block in the way of the successful regulation of public utilities. It is a problem common to all such regulation, and it unquestionably offers an opportunity for much constructive effort. The magnitude of the depreciation factor in the telephone field is indicated by the fact that an over-all depreciation reserve of no less than $1,145,000,000 had been accumulated on the books of the "Bell System" as of the close of 1936. This is not only a prodigious sum in itself, but it amounts to some 28 per cent of the total book investment of $4,040,000,000 represented by all "Bell System" depreciable plant items. The importance of the problem in connection with interstate telephone rates is further indicated by the fact that on the American Telephone and Telegraph Company's "Long Lines" system alone the charges to operating expenses on account of accruing depreciation are practically a million and a half dollars *each month*. That questions involving such operating expense charges may loom as large in rate studies as do questions of so-called "valuation" or "rate base" is apparent when we recall that an error equivalent to but one month's such charges on the "Long Lines" system would represent a return factor of 6 per cent on $25,000,000 in property "valuation." Moreover, at the present time this item of accruing depreciation accounts for more than 25 per cent of total telephone operating expenses of the "Bell System," and 15 cents out of every dollar of revenue goes to cover this depreciation item.

NO one will deny that the consumption of property used in furnishing telephone service is as much a part of the cost of furnishing the service as are the wages paid to the operators engaged in making actual telephone connections. Nor will any reasonable person quarrel with the dictum of the accountants that the using up of property in service must be taken care of currently by some method of spreading the inevitable loss over the life of the property in question. Such loss is made up of physical elements such as wear and tear and the action of time and the elements, and also of functional elements such as obsolescence, inadequacy, and the demands of the public authorities. A number of methods have been suggested for the accomplishment of the desired end. The Interstate Commerce Commission adopted the so-called "straight-line" accounting method, which divides the total cost into equal annual amounts over the estimated lives of the various classes of property in question, and the Federal Communications Commission has to date accepted that method in its accounting classification. While the advocates of the so-called "sinking-fund" and "retirement" methods are still active, and while much may possibly be said for the use of those methods in the utility accounting field, it is submitted that the choice of any particular method is relatively immaterial, provided it be reasonably adapted to the end in view, and provided that in using it all of the aspects of the depreciation problem be fairly and honestly welded into a harmonious whole.

FUNDAMENTALLY, I mean by this that there must be reasonable agreement between the depreciation expense accruals and the deductions for accrued depreciation which must be made in arriving at the rate base. Unfortunately, some utility representatives have taken what seems to the writer to be a short-sighted view of this situation, and have frequently allowed mere temporary advantages in individual rate cases so greatly to influence their position that the harmonious resolution of this problem has been materially delayed. Indeed, I sometimes wonder whether certain eminent members of the legal profession have not habitually, in these matters, had their tongues in their cheeks. It would otherwise be difficult

to comprehend their solemn and zealous advocacy of certain curiously incongruous positions.

For example, to assert that straight-line accruing depreciation charges must be allowed in operating expenses in such amounts as to build up huge reserves, amounting to as much as 25 per cent or more of book investment in depreciable plant, and at the same time to demand that the deduction for accrued depreciation in arriving at the "rate base" be limited solely to the wear and tear actually visible in the property at any given time, seems to the writer singularly inconsistent with the harmonious treatment of the entire problem to which the ratepayers are entitled. This is the so-called "condition per cent" theory, and it has been put forth with great vigor in numerous state telephone rate cases by representatives of the Bell Associated Companies, on the apparent reasoning that a depreciation dollar in the till is worth two in the pockets of a subscriber. In effect, these advocates have urged that their companies were entitled to charge sums to operating expenses on the straight-line basis sufficient to take care of all potential causes of future plant retirement, both functional and physical, thus building up large depreciation reserves, but that, on the side of "valuation," nothing could be deducted for realized depreciation that could not actually be seen with the eye, thus effectively eliminating from practical consideration in the value phase of the problem the elements of inadequacy, obsolescence, and other functional causes of retirement.

It is the practice of the Bell companies, in common with most other public utilities, to reinvest their depreciation accruals in new and replacing plant. To allow a return upon such reinvestments without the deduction of at least an equal amount from the cost of the properties upon which such accruals were made would, in effect, force the subscribers to pay a profit upon the original investment, now represented by property which has depreciated over the years, and at the same time to pay a profit upon the sums which they themselves have contributed to take care of this very depreciation on the straight-line basis.

While the "condition per cent" theory was no doubt ingenious and while its adroit originator should certainly be placed on a liberal pension, it has at times led in practice to almost ludicrous results, because of resultant incongruities between the claims that have been made for high "straight-line" depreciation accruals, on the one hand, and the low "observed" or "existing" accrued depreciation that has been admitted, on the other. Indeed, demands have at times been made for depreciation allowances in operating expenses each year that have equaled or even exceeded the total realized depreciation thus admitted to exist in the property. In the recent Los Angeles telephone rate case, for example, book investment in central office equipment totaled almost $50,000,000, or about a third of the company's depreciable property. An annual, straight-line depreciation accrual allowance of 4.8 per cent of that book cost was asked as an operating expense, amounting to an annual depreciation charge of $2,277,698. At the same time, and with a straight face, the company's representatives claimed that the "per cent condition" of this same equipment was no less than 96—in other words, that its present "condition," as determined by inspection, was 96 per cent of what it would be were it new property of the same type, similarly placed. This resulted in the solemn contention that depreciation of but 4 per cent had been actually realized in this property, over its entire life to date, a factor which, when monetarily expressed amounted to only $2,047,100. Had the company's contention been accepted it would therefore have been entitled to collect each year from its patrons to represent the accruing depreciation of that single year a sum greater by over $200,000 than the total depreciation which it would admit had occurred over the entire life of this equipment up to the date of the investigation.

EQUALLY far-fetched were the claims made in respect to certain other classes of property. On "private branch exchange" equipment, for example, the contention was that 8.3 per cent of the book amounts must be collected each year, though the total admitted "existing depreciation" was but 5 per cent. On building 2.5 per cent was demanded for annual depreciation, though the admitted total of accrued depreciation was only 3 per cent. Station apparatus required a 7.7 per cent annual depreciation rate, but its "condition" was only 10 per cent depreciated. And the composite straight-line annual expense charges over all the depreciable property in the company's plant were fixed at 4.42 per cent, as contrasted with a composite admitted "exising depreciation" on the "condition per cent" theory of but 6.99 per cent. In other words, over all the property, the full "existing depreciation" that was admitted would have been collected back from the subscribers approximately every one and one-half years, had the company's contentions been accepted.

Fortunately they were not. And the propositions so advanced seemed to the California Railroad Commission's depreciation engineer "so at variance with reason and facts as to cause the collapse of the method by its own inconsistencies." The commission itself, after setting forth the situation in a tabulation by classes of plant, remarked that:

> The extreme and unequitable results indicated by this table negative the soundness of the company's position in respect to depreciation.[1]

THE Interstate Commerce Commission several years ago pointed out what it termed the "absurd incongruities" which follow such curiously inconsistent contentions.[2] And that body, in adopting the straight-line method of depreciation accounting, declared that there is "an inseparable connection between the straight-line method and the principle that accrued depreciation represented by the depreciation reserve must be deducted in ascertaining the rate base value." If, said that commission,

> . . . any other principle should hereafter be adopted by the courts, a reconsideration of the entire question of depreciation accounting would at once become necessary.[3]

This problem of depreciation, including the various accounting methods and a harmonious program for taking care of property deterioration both in operating expenses and in rate base determination, is now being made the subject of intensive study by the Communications Commission. Surely a solution fair to all concerned should not be difficult, and the time seems to have arrived to put an end to this making a virtue of inconsistency. Some of the state commissions have urged, and certain of the courts have intimated that, if the "condition per cent" theory were to be accepted as a criterion of realized depreciation, corresponding reductions should be made in annual depreciation accruals. While this appears to the writer to be putting the cart before the horse, this proposition may well have to be adopted, if the "condition per cent" advocates continue their tongue-in-cheek onslaughts.

DOUBTLESS a semblance of harmony between accrued and accruing depreciation claims could thus be obtained, but reductions in annual accruals to the basis of physical causes of plant retirement alone would not safeguard public utility investors against loss, nor would they assure the public of receiving continuous and satisfactory service. This is because such a method would in effect eliminate from consideration all the important functional causes of retirement, and would remove from the protection of depreciation accounting many losses in plant service value that must be faced by any operating public utility. It is to

[1] Los Angeles *v.* Southern California Teleph. Co. (1936) 14 P.U.R. (N.S.) 252, 271.

[2] *Re* Depreciation Charges of Telephone Companies (1931) 177 Inters. Com. Rep. 351, 400.

[3] *Re* Depreciation Charges of Telephone Companies (1926) 118 Inters. Com. Rep. 295, 356.

be hoped that a more constructive solution may be arrived at, through a broad recognition of the fact that all these causes of retirement exist and must be taken care of. It appears to the writer that the rate-base depreciation deduction rather than the annual depreciation accrual is the item to be brought into harmony.

If a truly harmonious and equitable result cannot be attained under the straight-line method, the only alternative would appear to be the adoption of some other method of handling accruing depreciation, such as the sinking-fund method, or even the retirement method, despite the latter's obvious hazards to the utility investor.

Operating Expenses

ROUGHLY 80 cents out of every dollar contributed by telephone subscribers goes for operating expenses. Taxes at the present time consume approximately 15 per cent of these expenses; depreciation accruals take another 20 to 25 per cent; current maintenance amounts to 25 per cent; telephone commercial expenses total some 10 per cent; traffic expenses some 18 per cent, and general administrative salaries and expenses plus certain miscellaneous items consume the remainder.

Aside from the element of depreciation, such operating expense items have seldom received serious attention on the part of the regulatory authorities. Excluding taxes and depreciation, much of this expense is represented by wages and salaries, and it is probably a fact that the general level of expenses on any public utility system is largely a measure of the efficiency of management. Whether one man or ten shall be employed to perform a given task; whether maintenance routines shall be accomplished once a month or once a week; whether a certain grade of service shall be rendered at all times and at every point served—these, and many similar factors of a managerial nature delimit, in the usual case, the level of operating expense.

EVERYONE will at once recognize the difficulty of analyzing the propriety of such practices and their resultant expense. But this difficulty should not excuse the regulatory authorities from the task of facing this problem, irrespective of its complexity. Much of the time and energy heretofore largely wasted in traversing the barren valleys of so-called "valuation," might, it would seem, have been better devoted to this equally difficult but potentially much more fertile field.

It can fairly be said that, in the past, regulation has frequently imposed a penalty upon littleness, since the deficiencies of a small utility's operation are more readily discernible than are those of great statewide or nation-wide organizations. No serious minded person would suggest that regulation should assume the fundamental functions of management, but the danger of managerial manipulation inherent in these fields of operating expenses must at all times be recognized. Obviously, if the regulation of interstate telephone rates is to be adequate and successful, the problem of operating expense levels must be squarely met.

Special Rate Problems—Separation

PASSING now to the problems which may be regarded as specific to the telephone industry, the most important question is apparently that of so-called "separation." Accountants and engineers are often called upon to allocate the joint costs of various types of service, but in the telephone field this allocation or segregation problem is of special import as well as of peculiar complexity. If each general class of consumers is to bear its fair proportion of the over-all costs of operation, a full resolution of these questions will have to be had.

The problem long ago presented itself as between the properties, expenses, and related revenue requirements of exchange service as distinguished from toll service, and considerable work has been done on the subject. Studies have been

made in numerous rate cases tending to disclose the relative amounts (expressed in dollars) of these various elements, particularly in cases involving the establishment of local exchange rates. In a few statewide rate cases, the emphasis has been placed on the toll factor, but it was not until the Chicago Case (Smith *v.* Illinois Bell Teleph. Co. [1930] 282 U. S. 133, 75 L. ed. 255, P.U.R. 1931A, 1; Lindheimer *v.* Illinois Bell Teleph. Co. [1934] 292 U. S. 151, 78 L. ed. 1182, 3 P.U.R.(N.S.)337) that separation as between intrastate and interstate toll operations became really important in the picture. In that case the United States Supreme Court apparently stamped its seal of approval upon the so-called use basis of allocation, and much work has since been done along that line. Unfortunately, the methods presently in effect involve long and extremely complicated and expensive studies, the cost of which must in the end be borne by the consumers.

HOWEVER, since the Federal government possesses jurisdiction only over interstate operations, whereas the several state commissions are limited to the intrastate situation, the creation of the Federal Communications Commission has forced this question to the front. And of this problem the Supreme Court remarked:

> The separation of the intrastate and interstate property, revenues, and expenses of the company is important not simply as a theoretical allocation to two branches of the business. It is essential to the appropriate recognition of the competent governmental authority in each field of regulation. Smith *v.* Illinois Bell Teleph. Co. *supra* (P. U. R. 1931A, at p. 7).

Concretely, the problem is one of developing data which the present accounting methods do not afford to the investigator. Much telephone property may readily be classified, according to its actual use, into solely toll or solely exchange property, and such property presents no particular separation difficulty. But there is a vast segment of telephone plant which is jointly used in both operations. If a pole, for instance, is used to carry a number of telephone circuits, three-fourths of which are used for exchange service and one-fourth for toll, it is ordinarily included in the accounts, as they are presently kept, under the heading of exchange pole lines. Conversely, if a cable contains fifty pairs of wires used for transmitting "long-distance" messages and only twenty pairs used for local messages, it is ordinarily accounted for as a toll cable. This is what is known in accounting circles as the "major use" basis. Its chief advantage lies in its relative simplicity, and it has proved sufficient for most purposes. But it is not at all sufficient if what we are after is to know the exact amounts and proportions of property devoted to exchange and toll uses, respectively, or to interstate toll uses at any given time.

FOR example, the investment in a pole which has been classified by its "major use" as an exchange facility, must for separation purposes be divided into its relative exchange and toll factors. And if one or more of the circuits which it carries is used for interstate toll purposes there must be a further breakdown of the toll factor. Indeed, it has been argued that full separation on the basis of use demands complete allocation of all property, down to the last individual telephone instrument, in accord with its actual usage in exchange and toll service. When we consider the great structural complexity of a modern telephone plant, with its accumulations of land, buildings, central office equipment, pole lines, wire networks, cables, connecting wires, and telephone instruments, the intricacy of this separation problem becomes at once apparent. Yet without some reasonable separation of properties, as well as of operating expenses and revenues, it is obviously impossible to measure the reasonableness of exchange rates as contrasted with interstate toll rates.

Fortunately for interstate toll rate regulation, the "Long Lines" of the American Telephone and Telegraph Company presents no direct separation problem, since its operations are solely

interstate in nature. Conversely, the majority of the Bell associated companies offer no interstate service to speak of, and their operations fall almost wholly within the jurisdiction of the several state commissions. In respect to these companies the question of property separation is of importance only in connection with the proper level of compensation to be received by them for their services in originating and terminating interstate telephone messages interchanged with the "Long Lines" system.

On the systems of the six large multistate associated companies, however, the problem of actual separation is of immediate importance, since, in respect to these companies, some sort of separation of interstate properties, revenues, and expenses must be developed if regulation of their interstate rates is to be placed on more than a very rough and ready basis.

The practical application of this problem is already before us. As mentioned above, a large reduction in interstate toll rates was made on the "Long Lines" system as of January 15, 1937. To date, only one of the Associated Companies, the Southwestern Bell, has adjusted its own interstate rate schedule to conform with the new "Long Lines" rates. Active discussion has been going on for some months with another of the large multistate companies looking toward a similar adjustment. But to date nothing tangible has been effected, because that company has consistently taken the position that no separation of its interstate operations is now available, and that, in the absence of full separation data, the Federal commission cannot evaluate its interstate business, as distinct from its over-all operations, merely from a consideration of over-all operating results. Like Barnacle Bill, the commission stands knocking at the door, but the key is inside, where even the coy maiden cannot find it.

In view of certain pending discussions with Bell representatives looking toward possible simplified and less expensive separation methods, we have hesitated to ask the company in question to go to the large expense necessary to develop a complete interstate separation at this time, an expense now estimated at $335,000. But we are up against the gun. Either such simplified methods must be rapidly developed and the data on all affected companies produced, or the commission will be faced with the probable necessity of asking for separations on the present highly expensive basis in respect to each of these companies.

Regardless of the situation in respect to Federal jurisdiction, the state Commissions will frequently be faced with the necessity of separation studies as between intrastate toll and exchange service. A simplified and relatively inexpensive method of arriving at such results would be in the interest of all concerned, and it is to be hoped that some such method satisfactory to all parties, may be developed.

"Stimulation"

Changes in telephone toll rates apparently have considerable effect upon the volume of business to be expected. Thus, although existing studies are not conclusive as to the exact percentages, examination of the effects of the large interstate rate reductions of the past few years discloses that increases in volume varying from 20 to 40 per cent of the reductions have been experienced. This stimulating effect of rate reductions deserves more detailed study, and such study is now being jointly made by the company and the commission's rate and research group, with particular reference to the effect of the $12,000,000 reduction made by the "Long Lines" on January 15, 1937.

Estimates made by company officials at the time of that reduction indicated that, because of this item of stimulation, the net loss in revenues to the company as a result of the $12,000,000 reduction in rates to the public would not amount to more than $9,000,000, and might possibly be as low as $8,000,000. If this has in fact been the case, it apparently follows that considerably larger

savings to the public may be expected from future rate adjustments than the net losses which will be sustained by the company. If, for example, it were to appear that company revenues exceed those properly allowable by $5,000,000, rate reductions to save the telephone-using public nearly $8,000,000 could properly be effected.

The problem of correctly evaluating this stimulation factor is highly complicated, because of the many variations in demand occasioned by other causes, such as changes in general business conditions. But it is a matter of concrete moment, and as close an approximation as possible of the relation between the net effects of rate changes on the business and the gross effect of such changes on the patrons should be developed and kept currently up to date.

Bell System Problems—Western Electric Company Relations

UNDER the provisions of the contract between the Western Electric Company and the Bell telephone operating companies, substantially all of the latter's equipment, apparatus and material requirements are purchased from the Western Electric Company. The propriety of the prices paid for such apparatus, equipment, and supplies is therefore a matter of particular interest in the general telephone rate problem, because of the close relations which exist between that manufacturing and supply agency and the parent and associated operating corporations of the "Bell System." This relationship was discussed by the United States Supreme Court in the case of Smith *v.* Illinois Bell Teleph. Co., *supra,* in which the city of Chicago had urged that prices charged the Illinois Bell Company by Western Electric had been exorbitant. On this question the state commission made no finding, and the lower Federal court declared the city's contentions unsupported, remarking that, on its total business, the electric company had not enjoyed an average profit "in excess of 7 per cent and never above 10 per cent." The Supreme Court held this finding insufficient. It reviewed the Western Electric's business field and stated that it could not be assumed that that company's earnings as a whole "represent the net earnings from the sales to the Bell licensees generally or from those to the Illinois Company." Mere comparisons between the prices charged by independent manufacturers and those which Western applied to non-Bell operators were also held inconclusive, the court adding:

> The point of the appellant's contention is that the Western Electric Company, through the organization and control of the American Company, occupied a special position with particular advantages in relation to the manufacture and sale of equipment to the licensees of the Bell System, including the Illinois Company, that is, that it was virtually the manufacturing department for that system, and the question is as to the net earnings of the Western Electric Company realized in that department and the extent to which, if at all, such profit figures in the estimates upon which the charge of confiscation is predicated. (P.U.R. 1931A, at p. 10.)

THE case was remanded to the district court for further findings in conformity with this opinion, and that court thereupon found that the earnings of Western Electric Company, and its profits on sales to the Illinois Bell Telephone Company in the Chicago area, had been fair and reasonable, except for an increase in prices of 10.2 per cent, which became effective November 1, 1930.

When the case again reached the Supreme Court (Lindheimer *v.* Illinois Bell Teleph. Co., *supra*), the question of Western Electric prices was still among the issues, but the court rested its decision, which upheld a rate reduction order of the Illinois Commerce Commission, primarily upon a finding that the company had made excessive charges to operating expenses for depreciation. It therefore took the position that it was unnecessary to pass upon the Western Electric price problem. Thus no final judicial determination by the Supreme Court of the United States has as yet been had upon this matter.

The practical importance of the ques-

tion becomes apparent when we realize that from 1925 to 1930 Western Electric sales to the Bell companies averaged over $290,000,000 each year; that from 1926 to 1934 Western made approximately 92 per cent of the total sales of telephone apparatus and equipment enjoyed by all manufacturers of such products in the United States, and that during the entire period from 1913 to 1931, no less than 61½ per cent of the gross cost of plant and equipment constructed by the Bell operating companies was represented by materials purchased from Western. The remainder was largely made up of labor, company overheads, freight, and like items. Inasmuch as this period of nineteen years may be said roughly to constitute a complete life cycle of Bell System plant, it is apparent that almost two-thirds of the Associated Companies' present plant must today be represented by apparatus and materials purchased from Western. Constant scrutiny of the reasonableness of prices claimed for such a large proportion of investment seems essential, particularly in view of the close relationship between the parties involved in these transactions.

WESTERN Electric costs and prices were made the subject of lengthy study by the staff of the pending telephone investigation, and witnesses from that special staff testified at length on the matter. In general they expressed the conclusion that Western has been a very profitable adjunct to the "Bell System." They asserted that if an investor had spent $100 in 1881 for a share of stock in what is now the Western Electric Company and had made no change in such investment over the years, he would, at the end of 1936, have found himself in the possession of shares having a book value of $4,825, and in addition he would have received no less than $10,939 in cash dividends, or an average annual return of more than 195 per cent on his original investment. The American Telephone and Telegraph Company, which today owns 99½ per cent of the stock of Western Electric, and which at least since 1883 has controlled that corporation, has apparently been the principal beneficiary of this situation.

Moreover, since Western suffers practically no competition in connection with a large proportion of its sales to Bell System companies, competitive considerations would not appear to enter as a controlling factor into the fixing of Western's prices, which were increased some 20 per cent during the depression years, at a time when general price levels on most other manufactured articles were declining. Since these price increases of Western have directly affected the estimates and claims for "reproduction cost" and resultant "value" in numerous state telephone rate cases during these years, the importance of the Western Electric price problem must be obvious. The special investigation staff, after its lengthy study of this question, offered testimony purporting to show that Western's recorded costs overstate true costs, and that Western's prices on Bell used equipment have afforded unusually high profits to the company. What the findings of the commission may be upon this point must await its final report upon the investigation, but if the engineers' conclusions are substantiated it must follow that operating telephone company rate bases may be found to be too great, even in relation to investment or book cost items. The question is undoubtedly a serious one, and is of import to both the state and Federal commissions. No future examination of Bell telephone rates can apparently be complete without careful consideration of this problem of manufacturing costs and prices.

The "License Contract" Service Charge

IN common with a practice which has long been popular in respect to many other types of public utility corporate systems, a fee is charged by the parent corporation of the "Bell Telephone System" for services allegedly rendered to its subsidiaries under certain so-called "license contracts." And although it is

merely a department of the American Telephone and Telegraph Company, rather than a separate corporation, the "Long Lines" system contributes a similar fee.

Much controversy has developed in rate cases respecting the payments so made. This "license contract fee" derives its title from the fact that the rental of Bell telephone instruments and the licensing of their use by the various associated companies was originally the main stated purpose of the contracts. About twenty years ago, provisions were written into the license agreements whereby "Mother Bell" agreed in general terms to perform certain services, for the licensees—such services to consist of advice and assistance to the operating companies on such matters as operation and engineering, accounting, financial, legal, personnel, and the like.

Formerly the "license fee" included an amount for the rental of instruments and totaled 4½ per cent of the licensee's gross operating revenues. However, the instruments were sold to the operating companies in 1927, and the "license fee" currently charged is 1½ per cent of such revenues. While this item therefore does not loom large in any individual subscriber's rate, that it amounts to no small sum over all is shown by the fact that in the year 1936 a total of over fifteen millions of dollars was received by the American Telephone and Telegraph Company as "license contract fees" from its several Associated Companies and from its "Long Lines" department.

For many years the state commissions have wrestled with this license fee problem, for such fees, if proper and allowable, are chargeable on the books of the operating companies as operating expenses. But the state regulatory agencies were long handicapped by their inability to ascertain the true costs of rendering the alleged services for which the fees were provided. They could not ordinarily obtain access to the parent company's books, since it rendered no intrastate service in their states, and was therefore not directly amenable to their jurisdiction. And the American Telephone and Telegraph Company consistently took the position that its costs of performing the alleged license contract services were immaterial to the validity of the fee itself, provided a showing were made that the services were, in fact, of value. Until recently the courts apparently lent their support to this position, holding that the license contract was valid unless proved fraudulent, a fact which obviously no state commission was in any position to prove.

In the case of Smith *v.* Illinois Bell Teleph. Co., *supra,* however, the Supreme Court ordered the determination of the American Company's cost of furnishing license contract services, as well as "the reasonable amount which should be allocated in this respect to the operating expenses" of the Illinois Company.

Since the rendition of that decision, in December, 1930, much data as to asserted license contract service costs have been presented in several state rate cases. And in every instance the assertion has been made that these costs total an amount substantially greater than the fees received, the alleged discrepancy in 1936 amounting to more than $5,000,000 over the system. Indeed, by far the greater portion of all costs of operation of the parent company (aside, of course, from its "Long Lines" operations) are currently being claimed by it as "license contract" service costs.

The problem is particularly complicated by the fact that such costs are not separately recorded on the books of the parent company, and the claimed costs are therefore derived from allocations, based on judgment, made by the heads of the various departments and by certain key employees. Up to the present time no Supreme Court pronouncement has been made upon these showings of alleged costs, although at least one state commission has disallowed the entire license contract fee on the ground that

the cost was not sufficiently proved. *Re* Wisconsin Teleph. Co. (Wis. 1936) 13 P.U.R. (N.S.) 224, 258.

In the Communications Commission's general telephone investigation an analysis of these license contract relations and claims was made, and the telephone rate and research group is continuing that study, with special reference to the license fee currently charged against the "Long Lines" operations. Because of the similarity of this problem to those of the states and the Associated Bell companies, this study bids fair to prove of widespread interest and importance. It seems obvious that the combination of jurisdiction over the parent company, as well as, in this instance, over the fee-paying organism, places the Federal commission in a particularly favorable position to make this study.

Other Problems

MANY other problems present themselves in this pioneering stage of interstate telephone rate regulation, but they cannot be touched upon today. The subjects of patents and their utilization; of alleged suppression of inventions for business or economic reasons; of pensions to superannuated employees; of the effect upon local and long-distance telephone rates of the peculiarities of "Bell System" organization and control; of the relation of telephone rates to telegraph rates, a matter of social as well as of business import; of the teletypewriter and private line phases of interstate telephone wire usage; of the rapid development of the new teletypewriter exchange service, by which two or more such machines wherever located may be connected at a moment's notice; of the conflict between cost of service and value of service factors in the detailed spread-of-rates problem; of radio chain program transmission over telephone circuits, and of the imminent use of long-distance telephone facilities for transmitting television impulses from point to point—these and many other questions must be considered in connection with the specific problems I have already outlined. These are all matters of public moment and must be given serious attention by the Communications Commission if the efficient development of the interstate telephone network and its use is to be insured in the public interest, and if charges for the various services are to be successfully regulated.

Coöperation with State Commissions

THOUGH distinct in their separate areas of jurisdiction, the Federal and the state regulatory commissions find themselves on common ground in connection with many of these problems of telephone regulation. And the field is so extensive that mere jurisdictional jealousies need never arise. It is the announced purpose of the Federal Communications Commission to afford its fullest coöperation to the various state bodies in their efforts to solve these difficult and complex questions. In addition to a number of reports prepared by the staff of the general telephone investigation, the rate and research group has distributed a comprehensive report comparing the various toll rate schedules now in force on the "Bell System" throughout the country, and a report on the principles which apparently underly such existing "Bell System" toll rates is now being completed. It is expected that other reports of a similar character will follow, disclosing the results of analysis of one after another of the problems discussed today. Criticism, suggestions, and frank discussion have been invited, and the response of the state commissions and of their National Association have been ready and gratifying. Here, indeed, is a field where full and frank coöperation cannot fail to produce results of lasting public benefit.

The Conference Method of Rate Regulation

IT may have been noted that I have not today mentioned any pending formal telephone rate case. It is of course possible that some such adver-

sary proceeding will one day prove necessary, but to date we have attempted to deal with these problems upon an informal and consultative basis. Past experience with formal rate cases and with the long-drawn-out and frequently bitter litigation which often follows them, leads to the hope that our attempt to resolve these regulatory problems through full and frank discussion across the table may prove not only more expeditious, but also more effective and much less expensive from the standpoint of the ratepayers. Facts are facts, and the atmosphere of the council table seems much more calculated to make possible their proper development than is the heated, adversary air which naturally surrounds the respective advocates in the course of a formal trial.

Of course, honest men may well differ over the interpretation of facts, and over their implications. But if the men about the table are in fact honest, and if they are willing to be utterly frank, with all the cards face up, there need be no resultant bitterness over differences in opinion or interpretation. Indeed, the American Telephone and Telegraph Company itself rather clearly expressed the value of the informal method of attempting to resolve these regulatory problems in its 1936 Annual Report, in which it remarked that,

> The companies have been glad to participate in such conferences, feeling that discussions, conducted in a spirit of fairness and with opportunity to develop and consider all pertinent facts, are a more satisfactory basis for regulation than are the highly technical, prolonged and controversial formal hearings that have so often developed around rate questions.

"ETERNAL vigilance" is, of course, the price of success in the regulatory field, and mere "complacency" on the part of the public representatives can never take the place of sound and continuous investigation. But if, in the process, we can avoid unfounded assumptions and "pure suspicion"; if at all times we are afforded free access to the facts, and can bring ourselves to stick to the facts; if we can preserve as our aim the offering of frank, and, as we see the light, fair opportunity for reasonable informal presentation and resolution of these many questions, and if we are at all times met in the same spirit, there should be no occasion to adopt technical, adversary positions. But the consultative method is at best on trial. May I express my personal hope that it may prove successful. There will be time enough for formal proceedings if the informal method should fail.

It is of course true that the practices followed by the "Bell System" in its interstate telephone service, as well as the rates and rate schedules applied to that service have largely grown up outside of regulation. The regulatory body which has now assumed jurisdiction over this field must therefore scrutinize these rates and practices with particular care, and must look closely to their public implications. However, the very absence of a long background of Federal regulation in the telephone field renders it all the more essential for the underlying facts upon which that regulation must be based to be developed upon a firm foundation of understanding and, if possible, as the result of agreement. Only when these facts are adequately developed and properly understood can the policies to be followed in future regulation be fairly formulated, or the criticism of existing practices be reasonably evaluated. Since it is the particular responsibility of the Communications Commission to formulate as soon as practicable the fundamental policies to be followed in this regulatory field, the development of the factual background upon which this effort must be based is being pressed as rapidly as possible by the rate and research group. To date we have met with full coöperation from the representatives of the telephone industry, and we see no good reason why such coöperation and understanding cannot continue on the part of all concerned.

"What of the Future?"

TEN years ago a 3-minute telephone message between New York and San Francisco cost $16.50. Today the

same message, with vastly bettered service and technique, costs but $6.50, and the night and Sunday rate is $4.25. Between New York and Washington, D. C., the rate has decreased by 50 cents per message over the same period from $1.35 to 85 cents in the daytime, with a night rate of 60 cents. Because of the stimulating effect of telephone toll rate reductions on the business handled, and in the light of present seemingly highly satisfactory operating results, particularly on the "Long Lines" system, I would be the last person to suggest that an end to this process of toll rate adjustment has been reached.

Technical advances should also assist in materially reducing costs (and therefore rates) and in inviting an increased public use of the "long-distance" plant. Among such advances may be mentioned the new, so-called "carrier circuits," by means of which sixteen telephone messages may be handled simultaneously over a single pair of wires, through the use of tuned radio frequencies. And the dramatic new "coaxial cable," one of which is now in experimental use between New York and Philadelphia, will transmit no less than 240 one-way telephone conversations at one and the same time. It is possible to put twelve of these cables under one cable sheath of the same size as the standard cable now in use, and the voice circuit capacity of such a cable is therefore 1,440 at the present stage of development, as compared with approximately 150 conversation circuits in the present standard toll cable. Small wonder that this coaxial cable has been nicknamed the "garrulous gaspipe"! Only through its use will satisfactory long-distance transmission of television images apparently become possible.

WHILE the telephone field is but one of the Federal Communications Commission's several spheres of jurisdiction, it is apparently one of the most important of these public responsibilities. And the problems of interstate telephone rate and service regulation will doubtless grow in import as the years pass by. As yet even the pioneering spadework and stump blasting has hardly begun, although the fact that the commission is attacking the fundamentals of its telephone problem squarely and with vigor must be apparent to all who are familiar with this effort. The work of the present telephone rate and research group will, it is hoped, supply a background upon which the long process of day-by-day regulation of these vast organisms of communication may be carried on in the future, by means of men who have been trained and tested through the pioneering process.

If those who are today assembled about the council table in this work will at all times put aside the grinding of either private and corporate axes; if the approach to these problems by all concerned can be based upon a willingness and an honest desire to arrive at reasonable conclusions; if differences of opinion or of factual interpretation can be resolved with understanding and without bickering or bitterness, we may look to the future of interstate telephone regulation in this country with confidence.

The Rôle of the Federal Government in the Conservation and Utilization of Water Resources

By JAMES LAWRENCE FLY*

IT is a truism of history that rivers have been the arteries, while their valleys have served as the cradles, of civilization. James Henry Breasted and other great historians have written the stories of nations in terms of their

*General Counsel, Tennessee Valley Authority.

rivers. Within recent months the epic of a people has been told again in Emil Ludwig's poetic history of the Nile.

In America, as elsewhere, expansion has occurred along the lines of the waterways, and the development of those waterways has been a response to the pressure for expansion. Rivers' mouths have afforded many of the best harbors, and from the earliest days great cities have clustered there. River valleys determined the lines which the first westward migrations were to follow, and the locations of many inland settlements were fixed by the geography of the rivers. From earliest times, therefore, the use and control of our rivers has been a major concern of government. That concern is evidenced in any account of our national problems, and nowhere better than in the reports of the Supreme Court which have written and reflect so much of our history. Volumes picked almost at random from among the early or recent reports reveal the active interest of government in the waters of the nation.

It is indicative of the degree to which historical facts are taken for granted and forgotten that my remarks may seem far afield from the subject I was first asked to consider in this paper, "The Field and Scope of Government Ownership and Operation of Utilities and the Field and Scope of Private Ownership and Operation." But I think a little reflection will make it at once apparent that that subject cannot be approached with insight until the subject finally selected is first grasped. For at least in the case of the Federal government whatever interest it may have in ownership and operation of utilities largely stems from "The Rôle of the Federal Government in the Conservation and Utilization of Water Resources."

THE Federal government's responsibility for conservation and utilization of those resources is broadly and deeply rooted in over a century of our history. It covers navigation, reclamation, irrigation, flood control, soil conservation and reforestation, and other beneficial uses of water. But it must be remembered that basically our water resources are unitary. They consist of the waters themselves, the channels in which they flow, and the reservoirs in which they may be stored. Each phase of the problem has its own peculiar history, but all deal with the same basic elements. In this paper I cannot attempt more than to sketch the development of the government's responsibilities for the principal uses of our water resources. However, I believe that even this summary will make it clear that, although these responsibilities originated in response to apparently unrelated needs and demands, actually they are all part of a single comprehensive pattern.

The importance of our inland waterways for navigation was recognized long before the founding of the Republic. Washington related that, after one of his early western trips, he "could not help taking . . . a more . . . extensive view of the vast inland navigation of these United States, and could not but be struck with the immense diffusion and importance of it, and with the goodness of that Providence which has dealt her favors to us with so profuse a hand." He concluded, "Would to God we may have the wisdom to improve them."

Our rivers were the highways over which the pioneers surged West. A decade before Andrew Jackson came over the mountains into Tennessee, his father-in-law, together with a large group of settlers, had made a similar trip from the Carolina mountains down the Tennessee river, running the rapids at Muscle Shoals, reaching the Ohio at Paducah after the loss of only a few lives, and finally sailing back up the Cumberland to the site of the present city of Nashville. Later Jackson returned to Muscle Shoals to participate in its first bizarre land boom. From the Atlantic coast and the Gulf the colonists moved inland along the waterways and fixed the points through which our commerce was to flow.

RESPONSIBILITY of the Federal government for the development of the

interstate waterways was inevitable. The commercial chaos which had existed under the Articles of Confederation threatened ruin to the colonies. The need for national control of commerce, in that day largely water-borne, was one of the principal reasons for calling the Constitutional Convention. The Constitution removed the oppressive tariffs and embargoes. But this did not end the demand for congressional protection and promotion of commerce. The westward expansion of the American people was early accompanied by demands for extensive internal improvements, including the improvement of the waterways. Strange as it may seem from our present perspective, the commerce clause was almost forgotten in the great debates that ensued, and navigation improvement became involved in the controversy over the scope of the Federal authority to make internal improvements under the spending power.

Beside this great political conflict the current controversy over the government in the power business pales into polite dialectics. Jefferson, Madison, and Monroe, although in general opposed to Federal responsibility for internal improvements, appear to have favored Federal improvements in the field of navigation. They feared its use as a wedge opening the door to all internal improvements. Even more, they came to fear the impact of any extension of Federal power on another great issue of the day—slavery. Accordingly, Jefferson and Madison and, at first, Monroe suggested that navigation and other limited works be authorized by specific constitutional amendment.

BUT the battle as to constitutional authority was soon to be fought on another front, shifting, as have many of our great controversies, from the political to the judicial arena. At the beginning of the nineteenth century, just after the invention of the steamboat, a series of acts of the New York legislature had secured to Fulton and Livingston the exclusive navigation by steamboat upon all navigable waters of the state. Livingston, who, as Ambassador to France, had negotiated the Louisiana Purchase, later successfully negotiated with the territorial legislature for a similar monopoly of Louisiana waterways. Two of the most important rivers thus monopolized, Livingston and Fulton held the keys to the two chief American ports. A half dozen of the more important coastal states having already conferred upon private interests exclusive rights to the use of their navigable waters, the nation was thus on its way to a monopoly of steamboat transportation in the hands of these gentlemen and a few kindred spirits.

Here again were bitter conflicts, this time between the commercial interests of the various states. This commercial rivalry led to recriminatory statutes by the different legislatures. Litigation thrived. With commerce throttled, civil war threatened.

Fulton and Livingston nevertheless proceeded to parcel out the navigation rights on certain stretches of the waters controlled by them. They assigned the exclusive navigation franchise between Elizabethport and New York city to former Governor Aaron Ogden of New Jersey, who had threatened to compete. Thomas Gibbons, a former partner of Ogden and a citizen of Georgia, who had only a Federal license to engage in the coastal trade, traversed that stretch of water. The New York Court of Errors affirmed the great Chancellor Kent in sustaining the monopolistic grants and enjoined Gibbons from sailing on New York waters. Gibbons appealed to the United States Supreme Court.

THE case was heard in the heated atmosphere of the states' rights controversy, inflamed by the current congressional debate over a bill to authorize internal improvements.

The brunt of the battle against the steamboat monopoly fell on the young Webster, then fresh from the arguments in the Dartmouth College Case (1819) 4 Wheat. 518, 4 L. ed. 629, and McCulloch *v.* Maryland (1819) 4 Wheat. 316, 4 L. ed. 579. Marshall, with

quill in hand, was more favorably poised for Webster's argument than counsel knew. Four years earlier, on circuit, he had already asserted the broad power of Congress over commerce in an opinion of which the great advocates in Gibbons *v.* Ogden (1824) 9 Wheat. 1, 6 L. ed. 23, were quite unaware.

Marshall's epochal opinion established for all time the exclusive control of the National Government over interstate navigation. Warren has termed it the "most potent factor in the building up of New York as a commercial center" and "the emancipation proclamation of American commerce." The back of the first great monopoly of the nation's water resources was broken.

The decision did not open a novel field, for the Federal government had authorized surveys of the Mississippi and Ohio rivers prior to that time, but it was followed by a noteworthy spurt of activity. Another and more comprehensive survey was authorized, and money was appropriated to remove obstructions from those rivers. Before the end of the year President Monroe forwarded to Congress the report of Secretary of War Calhoun, which recommended an ambitious plan of integrated roads, canals, and improved rivers interconnecting various parts of the United States, including the improvement of the Tennessee river at Muscle Shoals.

The states' rights theory, however, exerted some influence on the angle of approach. Thus, in 1828, Congress made the first of a series of futile land grants to the states, giving to the state of Alabama four hundred thousand acres to induce the improvement of navigation at Muscle Shoals. As the National Government moved gingerly in the assumption of direct responsibility, popular sentiment increasingly favored the government's development of the inland waterways.

By the middle of the century when the states' rights controversy had become focused on other issues, President Fillmore, in his first annual message, recommended that the Federal government undertake direct works for waterway improvements, for the reason, as he said, "that if these works, of such evident importance and utility, are not to be accomplished by Congress they cannot be accomplished at all." On the constitutional question under the commerce power, he entertained no doubts. "The magnificent Mississippi and its tributaries," he said, "appear to me to fall within the exercise of the power as justly and as clearly as the ocean and the Gulf of Mexico. It is a mistake to regard expenditures judiciously made for these objects as expenditures for local purposes."

With the feverish expansion of the railroads, water transportation was relatively neglected. Nevertheless, by 1882 the government had spent over a hundred million dollars on its rivers and harbors. And, as the country became more permanently settled, a clearer picture of our transportation needs gave new emphasis to such improvement.

Meanwhile, the courts were entrenching the legal foundation for broad national development of water resources. When efforts were made to limit the government to regulatory activities, the Supreme Court merely referred to Marshall's decision, saying that the government's right "rests upon principles of constitutional law now established beyond dispute." Protests against the government's regulations of structures, its construction of canals, dams, and other works were disposed of in turn. Attempts of states, of cities, of private interests, to encroach upon the paramount rights over navigation met with uniform failure in the Supreme Court. Water power, a valuable by-product of navigation structures, suggested a means of reimbursement. And the court at once recognized the relation of the water power to the physical structure which had concentrated the fall at a single point. Efforts of states and private interests to secure to themselves a portion of the resources captured by such structures were, alike, met by statements such as that classic sentence in the Green Bay Case (1898) 172 U. S. 58,

80, 43 L. ed. 364: "In such matters there can be no divided empire."

THE development of our rivers by no means kept pace with the scope of congressional power as defined by the Supreme Court decisions. At the turn of the century the conservation movement, then taking stock of our natural resources, found that the water resources had been far from adequately developed or exploited. In 1908, Theodore Roosevelt complained of the neglected condition of our waterways and of the small part they played in the industrial life of the nation, despite the fact that, as he said, "in extent, distribution, navigability, and ease of use, [our rivers] stand first."

The World War dramatized this inadequacy. Existing transportation was unable to carry the burdens of wartime traffic. As a demonstration of what could be done to round out the national system, the Inland Waterways Corporation was created in 1924. The renewed interest in waterways beginning with the conservation movement was, meanwhile, evidenced by expenditures of nearly a billion dollars on river and harbor improvements from 1906 to 1925.

Conditions of economic and social unbalance looked to water transportation as a possible remedy. Herbert Hoover, Secretary of Commerce, stated the case in an address to the Mississippi Valley Association in 1927. He urged that:

> . . . in our necessity to remake and energetically construct . . . flood control works . . . we must not be diverted from our march to the improvement of our inland waterways.
>
> * * *
>
> The urgency of the situation to be remedied, to a large degree, grows from the economic shifts due to the war which have brought a new setting to all our mid-Continent.
>
> * * *
>
> Mid-West agriculture and Mid-West industry have been placed in a new relationship to different parts of our country and to the world markets as a whole. If we would restore these former relationships, we must find fundamentally cheaper transportation for our grain and bulk commodities which we export and the raw materials which we import into the Mid-West.

MR. Hoover's emphasis on the war as the cause of these unbalances may seem exaggerated. But with the fundamental soundness of his analysis there can be no quarrel. Some of the conditions which he described predated the war and were aggravated by the completion of the Panama canal. For example, the canal enabled Atlantic seaboard industries to take west coast business from inland industries actually located much nearer the market. And the converse process was also true. Indeed—and the bridge players among you will understand me—the inland producers were in the middle of a crossruff. The rates of intercoastal rail lines have tended to be fixed at levels competitive with the parallel water routes. The advantages of communities accessible to waterway transportation thus became further entrenched. And as the situation has become more and more acute, plans for the comprehensive development of inland navigation have evolved.

Technological advances have played a large part in making these plans feasible. Improved water transport facilities have paralleled improvements in methods of channel development. There are today almost thirty thousand miles of navigable waterways already improved or under improvement, including about six thousand miles for standard 9-foot depths. Today river transportation of bulk commodities compares favorably with any other transportation as to speed, dependability, ease of handling, and operating costs. Traffic is increasing annually. There may still be some who, as Mr. Hoover humorously remarked, conceive the development of the waterways as a visionary effort which is designed to do no more than "restore the romantic steamboatin' days with gay river steamers whistling down the reaches, with possible Mark Twains aboard." To any such it may be observed that they are unaware of some of the most important economic developments of the last generation.

THE 1927 flood on the lower Mississippi destroyed whatever remained of insular thinking on the flood problem. With dramatic suddenness it brought home to the nation its *second* major responsibility in the control of inland waters. The pioneers who settled along the paths of the river highways settled also in the paths of the great floods.

In the early days, flood control was regarded largely, but by no means exclusively, as a local responsibility. While political considerations may have had some influence in this attitude, the problem actually appeared to be local. The country was unsettled; population and industry were scattered; sections were comparatively self-contained. The first Federal aid was accordingly limited to contributions to the affected states. But Federal surveys and studies were subsequently authorized and completed, and these culminated in the establishment of the Mississippi River Commission in 1879.

In the outset, appropriations for the works recommended by the commission were limited to levees for the purpose of protecting river traffic. A little later these restrictions were removed in appropriations to which no conditions were attached, except that they should be matched by contributions from the states. Thereafter, regular Federal assistance was rendered. But the individual appropriations were small until the 1916 flood. With that event, Congress recognized the national character of the problem and substantial expenditures were authorized.

The physical problem of controlling the flow of a river involves the entire drainage basin. Our greatest and most unruly river drains thirty-one states and 42 per cent of the country. We have now come to appreciate the fact that floods are caused by rains hundreds of miles from the flooded zone. The area affected by the flood itself is tremendous in size. Local protection cannot possibly cope with the problem. To take one of countless examples, a local levee has frequently increased the hazard of other affected areas.

IN recent years the flood problem itself has intensified. The rate of water run-off from the land has accelerated by the stripping of forest and plant cover from the soil. The intensity of floods is naturally increased, and new flood heights continue to be registered. With the concentration of industries, property, and population in the river valleys, the havoc wrought by floods becomes progressively worse, and correspondingly the national interest becomes greater. While the floods of 1912 and 1927 covered approximately the same land areas, the damage caused by the latter flood was four times that of the earlier one. An eminent engineer has said that every investor in the railroads and industries of the South suffered a loss from the flood of 1927. He might fairly have added that, in our interdependent economy, every one in the country suffers from a major flood catastrophe.

The Flood Control Act of 1928 was drafted to meet a critical emergency created by the flood of the year before. There was not time to make the comprehensive engineering studies which Congress recognized were needed. The act provided immediately only for a continuation of flood control by extension of the levee system and diversion floodways. But at the same time it directed the early completion of studies which were then under way looking toward supplementing the levees by a system of tributary reservoirs.

THE system of flood protection relied on in the past has consisted mostly of levees designed to confine the water to the rivers. The natural result has been an increase in flood heights with resulting difficulties. The residents of the Mississippi alluvial valley are demanding that floods be controlled by reducing their height rather than by confinement. In a recent public meeting, the speaker for a Mississippi valley city said, "We want the Mississippi river floods controlled, but we want them controlled down, not up." Of course, the present comprehensive system of levees is of great importance in controlling de-

structive flood waters in the lower Mississippi. Indeed, these levees are necessary. But it is clear, and it is now generally recognized, that levees must not be depended upon as the sole means of protection; they must be supplemented. Recent studies indicate that reservoirs are indispensable for effective reduction of flood heights, and the legislation subsequent to the 1928 Act has made provision for reservoir control. The system of reservoir control emphasizes more than ever before the interrelationship and interdependence of navigation and flood control recognized by the Supreme Court in the Jackson Case. The same structure which holds back the waters in times of flood provides the flow for maintaining a navigable channel in dry seasons. As elsewhere, engineering conclusions were translated into legal principle as the court enunciated the legal relation of the flood problem to "the plenary power of the United States to legislate for the benefit of navigation." Jackson *v.* United States (1913) 230 U. S. 1, 23, 57 L. ed. 1363, and cases there cited.

Our last pioneering movement westward was responsible for the *third* major phase of the government's interest in water control. Its origin lay in the government's policy, under the Homestead Act, of encouraging the settlement of the public domain in small individual holdings. It was soon discovered that the purposes of the Homestead Act could not be achieved in the arid sections of the West because individual settlers were unable to provide the necessary irrigation works. The early Reclamation Acts were passed in order to make these arid lands marketable and habitable.

A beginning was made in the Act of October 2, 1888. This was succeeded by other laws, and as early as the Act of 1902 the Federal government was undertaking reclamation on an extensive scale. As amended by the Act of 1906, which provided for the disposition of the electric power created at the projects, this law has fixed the general policy of the Federal government with regard to reclamation and irrigation.

At the outset, the constitutionality of the reclamation measures was confidently attacked. True to the traditional opposition of private interests, it was urged that these laws were designed to put the government into the real estate business. The minority report on the Reclamation Act of 1902 accused its proponents of turning the government into a "real estate improvement society." But the courts could not fail to recognize the larger aspects of the problem. The act was held valid under the property clause as a means of improving the public domain to make it marketable. It was expressly approved by the Supreme Court in Kansas *v.* Colorado (1907) 206 U. S. 46, 51 L. ed. 956.

The giant reclamation projects like Roosevelt, Boulder, Grand Coulee, and Fort Peck, are also concerned with other purposes, such as navigation, flood control, and the development of hydroelectric power. But in so far as irrigation is concerned, they are examples of the present-day execution of the policy determined by the original Reclamation Acts. Naturally, as the reclamation policy has developed, the government has been concerned with storing and providing water for private arid lands, as well as the public domain. Whatever doubts there may have been in Kansas *v.* Colorado concerning such practices, it is clear under the Supreme Court's decision in the more recent Boulder dam litigation that the government has come to have a controlling interest in the disposition of the waters impounded by its multiple-purpose projects.

Limitations of time have precluded any discussion of a number of incidental water problems, such as those involving pollution and recreation. As to the major uses, I have, however, endeavored to state in brief outline the history which has inevitably given the National Government a predominant position in the control and utilization of water resources. The most notable and interesting feature of this deep-rooted history

has been the gradual recognition of the inseparability of the various phases of the subject and the necessity for laying plans on a broad base in order to produce multipurpose projects of maximum usefulness.

In the early years most of the projects, whether public or private, were designed for only one purpose. When there was need for river improvement for transportation and commerce, a navigation dam or lock or a canal was constructed, or dredging was carried on. If water was needed for irrigation, a canal or dam and reservoir was designed solely for irrigation. If a local flood hazard became apparent, a levee or spillway was provided. If an industry, a city, or a utility needed power, a dam was designed for power alone. If a problem of pollution arose, steps were taken to meet it without any consideration of the pattern of water control as a whole. Each need was separately met on its own individual merits. Other uses were overlooked, and the needs of adjoining regions went unattended.

The construction of multiple-purpose projects by the government was not the result of any *a priori* theory. The facts determined the policy, and policy developed as existing facts were recognized. A striking example is afforded by the manner in which the government became concerned with the production of electricity at reclamation projects. When large-scale Federal reclamation began thirty-five years ago, the opportunities to generate power as an adjunct to irrigation were so little appreciated that they were ignored in the Act of 1902. But the power was there, whether the government was interested in it or not. Discovering that it was already the owner of valuable water power falling over the dams, the Congress thereupon amended the act to provide for its utilization and disposal. A quarter of a century earlier Congress had seized upon special opportunities for undertakings having more than one purpose. An early act, for example, authorized projects combining irrigation and flood control. But the full significance of projects combining more than one purpose did not appear until the development of engineering methods adequate for the demands of multiple-purpose projects.

With the increasing utilization of our water resources made possible by engineering progress, the natural relationship among the various uses of the waters became progressively more important. The possibilities both for integration and for conflicts multiplied. Integration was no longer merely desirable; it had become essential to avoid serious conflict and waste. The nature and causes of these conflicts and interrelations are so important that it is worth while to discuss them for a moment.

Some of the conflicts are obvious. Water diverted from a stream to serve one community or industry depletes the supply available to everyone else. A levee which protects the lands on one side of the river may increase the flood hazard on the other side. Some of the conflicts are less obvious. A dam constructed for the sole purpose of controlling the floods on a single tributary of the Mississippi may discharge the stored water on the crest of a flood on the lower Mississippi itself. A dam constructed and operated solely for power purposes may hold back water when it is needed for navigation and discharge it on the flood peaks.

The same interrelations which cause these conflicts can, if properly planned and administered, be used to secure multiple benefits from the projects. The same dam that levels the slope in the river to improve navigation concentrates the water fall and thereby creates water power. The same water which is stored to prevent floods may be released in time of drought to promote navigation, to produce power, and to irrigate arid lands. Two dams on the same stream, if operated together, may do the work of three. If operated independently, one may interfere with the other.

Failure to appreciate the interrelation in the various uses of a single proj-

ect, failure to appreciate the interrelation between projects, were in part responsible for haphazard private development. The nation was alarmed by the extent to which unrelated projects, designed for single purposes, threatened the future of our rivers. Numerous power dams had been constructed under Federal authority, but in helter-skelter fashion. The dams were frequently located at points which were disadvantageous from the point of view of navigation and which would not fit into comprehensive plans for navigation improvement. The dams failed to utilize the navigation or flood-control possibilities of the sites, and there was not even assurance of full utilization of power possibilities. Instead of blending into a sound pattern of development, often they were worse than nothing in that they occupied the site and precluded later development according to an intelligent plan.

I do not mean to be critical. From the point of view of the private interests responsible for those developments, they had done a good job. They had taken the best power sites and developed them sufficiently to serve contemporary demands; but they were inherently incapable of accomplishing the rounded and integrated development required in the best interests of the whole public. They were, after all, not interested in two of the major purposes of river improvement—navigation and flood control—and they were interested in power only to the extent of immediate demands.

NATURE has been sparing in the provisions of valuable sites for water storage, long recognized as essential for navigation and irrigation purposes. The recent recognition that storage reservoirs are indispensable to effective flood control in critical areas aggravates the problem of discovering an adequate number of reservoir sites. Many sites which nature has supplied are unavailable, either because of the location of improvements too valuable to permit inundation, or because the sites may already be occupied by dams built for limited purposes. It is therefore all the more necessary that such sites as remain available be made to do double or triple duty in the public service.

These double and triple-duty projects also save expense and frequently make financially feasible improvements which could not otherwise be afforded. It is obviously less expensive to provide by a single structure for more than one use of the water than to provide a separate structure for each use. Congress has often felt that cost of engineering structures for navigation alone or for flood control alone was prohibitive, while a structure serving both navigation and flood-control purposes would be considered amply justified. Some projects which are not financially feasible even for navigation and flood-control purposes combined become feasible by the utilization of the water power.

The development of an integrated system of multipurpose projects was the natural outcome of the interrelation and interdependence among the various uses of the waters which have been described. Only through such a comprehensive development can the optimum use of capital, of sites, and of water be attained.

POWER is only one of the many phases of water control which enter into the complete picture. However, it bears a special relation to the others. It is the paying partner. It must be remembered that the other purposes do not pay their own way. There is no feasible way of assessing the benefits of a widespread plan of navigation and flood control; and even reclamation presents difficulties. Power rights, being valuable, have been coveted by private interests, and their utilization by the government has been bitterly attacked. Often the government has been attacked for the expense of the project by the same interests that sought to deny it the right of reimbursement by the sale of power.

President Theodore Roosevelt believed that the government should develop the water power as a part of its navigation improvement, and that no private license should be granted except

on the payment to the public for the use of any water-power rights conferred. He drew the essential facts to public attention more than a third of a century ago in a message to Congress vetoing a bill to renew a franchise of the Muscle Shoals Power Company to construct a canal and power station, on the ground that it did not contain any provision for such payment:

> The recent development of the application of water power to the production of electricity available for use at considerable distances has revealed an element of substantial value in streams which the government is or is likely to be called upon to improve for purposes of navigation, and this value, in my judgment, should be properly utilized to defray the cost of the improvement.

The wisdom and the right of the government to pursue this course was endorsed by the leading public men of the day, including President Taft and Elihu Root. Root, then a Senator, in a debate before Congress, urged that we should

> . . . avail ourselves of this new discovery by which a stream can be made to improve itself, by which a stream can be made to pay the expense of fitting itself for navigation . . .

And President Taft vetoed a bill for the private construction of a dam on the Coosa river in Alabama on the same grounds assigned by President Roosevelt in the earlier veto.

BUT the conservation movement, of which these statesmen were leaders, went far beyond the limited issue of government utilization of power. Power, though then, as today, a center of controversy, was only one of their interests. Thirty years ago they recognized the need for comprehensive developments preserving all the values inherent in our rivers.

The policy of the conservationists was to prevent the waste or monopoly of the resources of the country—all of them, minerals, forests, oil, coal, agricultural land, as well as water resources. The aim was to develop their greatest utility in the public interest. As in the case of the other natural resources, the conservationists appraised the experience of the past and the potentialities of the future in the field of water resources. They took account of the reckless wastes and of the natural limitations. They observed that the prior attempts at regulation had been ineffective. And, considering all these things, they formulated the principles which form the basis of present policy.

A generation ago, President Roosevelt's Conservation Commission recommended comprehensive and unified development of our rivers:

> Broad plans should be adopted providing for a system of waterway improvement extending to all uses of the waters and benefits to be derived from their control, including the clarification of the water and abatement of floods for the benefit of navigation; the extension of irrigation; the development and application of power; the prevention of soil wash; the purification of streams for water supply; and the drainage and utilization of the waters of swamp and overflow lands.

THIS was in 1909. As early as 1912, the National Waterways Commission, created by an Act of Congress in the Taft administration, submitted its report which forecast that the Federal government must inevitably undertake the unified development of river systems by means of multipurpose projects:

> With the increasing unity of our national life and the growing necessity of securing for human needs the maximum beneficial use of the waters of every stream it will become increasingly necessary to treat every stream with all its tributaries as a unit. In the nature of the case so comprehensive a policy could be successfully administered only by the Federal government, and consequently, the eventual desirability of Federal control is easy to predict.

This report was adopted by the Subcommittee of the Senate Judiciary Committee in 1915 in a report prepared by Senators Root, Nelson, and Chilton. By 1916, these recommendations had found expression in legislative proposals which were debated on the floor of the Congress. Thus, in connection with the Shields Bill in 1916, Senator Newlands offered a comprehensive amendment in twenty sections providing for an appropriation of $60,000,000 a year for

ten years for the development of water highways, the storage of water for irrigation, and the construction of huge reservoirs to stabilize water flow. Under this proposal the country was to be divided into regions corresponding to watershed areas. Provision was made for scientific investigation of each drainage basin and for formulating plans for coördinated comprehensive development. The proposal failed at the time, but the policies which were implicit have been incorporated in whole or in part in all the important legislation subsequently enacted on the subject of water control: the Federal Water Power Act, the Boulder Canyon Project Act, the Rivers and Harbors Act of 1930, and the Tennessee Valley Authority Act.

Apparently conservation principles descend through blood rather than political lines. For it remained to President Franklin D. Roosevelt to give the fullest expression to the principles of the conservationists. The best articulation and the first practical conception on a nation-wide basis is found in the pending measures endorsed by the President providing for the creation of seven conservation authorities.

TODAY the general course of the development of water conservation is thrown out of perspective by the controversy centered upon one isolated issue—hydroelectric power. There is always the danger that, becoming absorbed in the spectacle of passing conflict, we shall fail to observe the orderly processes of evolution which are at work. From the outset, the relation of the National Government to the use and control of the waterways has been a critical issue fought out on many fronts. From the time of the Revolution the general problem, in the broad setting which it occupied, has been confused by the attacks of particular interests upon some single phase affecting them and by the political form which those attacks assumed.

Sometimes in an effort to compose these conflicts the government adopted a local approach to national undertakings. However, history has demonstrated that a local or private approach to these essentially national problems must in the end fall short. The conflicts must be recognized as incidents in the historical process. From the compromise of the conflicts and the clashes of interests in the past and their adjustment to national needs, there emerged the concept which prevails today: integrated multiple-purpose projects which develop for the social good the full potentialities of a river system. And, as the social, the economic, the engineering forces have thrust upon the Federal government the responsibilities which it now holds, they have been woven into the fabric of the law.

Employment and Management in the U. S. S. R.

"THERE is no unemployment [in Russia] now simply because there is a constant labor shortage . . . The labor shortage has been made more acute by the fact that inefficiency, bureaucrack, and the prevalence of parasitic functionaries have greatly reduced labor productivity. Foreign engineers have estimated that four times as many persons, or more, are required under Soviet conditions to turn out a given production as are required in the United States . . . But industry is going badly from top to bottom . . . The Soviet has given industry everything in materials, but has failed to give the most important thing of all—freedom to executives to use their own initiative and to make their own decisions, confident that if a high percentage of decisions are correct an occasional error will be forgiven. In the Soviet an executive error may land a good man in prison under terrible charges of wrecking . . ."

—HAROLD DENNY,
Moscow Correspondent, The New York Times.

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Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND RECOMMENDATIONS OF COURTS AND COMMISSIONS

VOLUME 20 P.U.R.(N.S.) NUMBER 2

Points of Special Interest

Titles and Index

TITLES

INDEX

The Lone Star Gas Company

v.

City of Fort Worth

[Gas Utilities Docket No. 108.]

Valuation, § 75 — Ascertainment of reproduction cost — Hypothetical estimates.

1. The Commission should not be governed by purely hypothetical estimates of cost when facts are available to guide it, p. 98.

Valuation, § 275 — Gas distribution system — Bell-hole excavation.

2. The cost of Bell-hole excavation is more logically treated as part of the cost of excavation and backfill than as part of cost of laying and testing natural gas distribution lines, p. 100.

Valuation, § 276 — Gas distribution lines — Jointing material.

3. Allowance for blocking material on bell and spigot pipe is proper when the use of blocking material facilitates the work although it might be possible to dispense with such material, p. 100.

Valuation, § 277 — Gas distribution lines — Cost of hauling earth.

4. A determination of the cost of hauling away excess earth in laying natural gas distribution lines is fallacious when a study is made of a certain number of yards but in arriving at unit costs all jobs on which there was no excess earth to be removed are excluded, since the percentages are higher than thy would be if all jobs were used, p. 100.

Valuation, § 167 — Paving over mains.

5. Estimates of paving cut and replaced in reproducing property of a gas distribution utility should be excluded when, according to the company's history and experience, such costs were not actually incurred, p. 101.

Valuation, § 132 — Overheads — Omissions and contingencies.

6. An allowance of one half of one per cent was held to be fair and reasonable in determining the rate base of a natural gas distribution system, where the thoroughness with which the property had been inventoried led to the conclusion that very little, if any, property of the plant had been omitted, p. 104.

Valuation, § 77 — Reproduction cost estimates — Piecemeal construction.

7. An estimate of reproduction cost new should not be based upon piecemeal construction in arriving at some of the unit costs, p. 104.

Valuation, § 78 — Reproduction cost estimate — Actual or different plant.

8. Resort cannot be had to an estimate of a plant or system different from the one in question in estimating the value of a particular plant on the basis of reproduction cost, p. 106.

Valuation, § 137 — Incorporation expense — Separate division of corporation.

9. The Commission cannot allow as legitimate costs expenses incident to

an assumed incorporation of a distribution system when the system has been operating for years as only a division of a large transmission corporation, p. 106.

Valuation, § 143 — Overheads — Preliminary and organization expense — Division of corporation.

10. An assumption, in determining reproduction cost of a gas distribution system, that the plant would be constructed by an outside concern and that other services would also come from sources outside an affiliated group of which the system is a division is fallacious when the record discloses that the legal, engineering, and accounting staffs of the group are available to any member of the group, p. 106.

Valuation, § 129 — Overheads — Administrative and legal expense.

11. An allowance of 2 per cent of the physical plant of a natural gas distribution system was held to be adequate for administration and legal expense, p. 108.

Valuation, § 134 — Overheads — Engineering and supervision — Proof.

12. Some sort of factual basis should be required for calculation of allowances for engineering and supervision rather than relying upon uncertain and purely hypothetical assumptions and calculations, p. 108.

Valuation, § 135 — Overheads — Engineering and supervision — Gas distribution system.

13. An allowance of 3 per cent of the total physical properties, less the value of land, leaseholds, rights of way, and general property, was held to be adequate and reasonable for engineering and supervision in determining the value of a natural gas distribution system, p. 108.

Valuation, § 150 — Overheads — Taxes during construction.

14. No allowance should be made for taxes during construction in determining the rate base of a public utility, where there is no evidence that the company ever paid such an item on work in process and where the policy of the taxing authorities is not to levy taxes on work under construction, p. 110.

Valuation, § 140 — Overheads — Interest during construction.

15. Interest during construction of a natural gas distribution system was allowed at the rate of 6 per cent per annum for a construction period of eight and one-half months, resulting in a rate of 4¼ per cent, based on the total value of the physical property less the items of general property plus preliminary and organization expense, administrative and legal expense, and engineering and supervision during construction, p. 111.

Valuation, § 313 — Cash working capital — Natural gas utility.

16. An allowance for cash working capital of a natural gas distribution system was based on forty-five days' operating expenses, which represented recent experiences of the company, p. 111.

Valuation, § 290 — Working capital — Bank balance.

17. A bank balance figure was eliminated from the allowance for cash working capital where evidence did not disclose the necessity of such balance in order for the company to secure proper banking facilities, p. 111.

Valuation, § 332 — Going concern value — Separate allowance.

18. No separate allowance should be made for going concern value when

in the determination of fair value the Commission has treated the different items of property as composing an active and successful plant doing business with customers attached and has made allowances for overheads, p. 112.

Valuation, § 250 — Customer contributions for extensions.

19. Extensions for which customers have made contribution are properly included in present fair value if used and useful in serving the public, when there is no obligation on the company to refund any part of the contributions and the company has absolute title to the property, since the method by which the company acquires its property is not determinative of whether it should be included in the rate base, p. 113.

Valuation, § 193 — Property not used or useful.

20. Property not used and useful in serving the public is not to be included as part of the property on which a public utility company is entitled to a return, p. 113.

Procedure, § 16 — Duty of utility to furnish evidence.

21. A regulated public utility company owes the duty and has the responsibility of freely furnishing information upon which a just regulation can be based, p. 114.

Expenses, § 80 — Home service survey — Merchandising and appliance expense — Nonrecurring items.

22. The cost of special home service survey by a natural gas distribution company, including such items as payroll, car fare, auto expense, business cards, dinners at a hotel, filing cards and service slips, customers' information folders, photostats of pipe-line system, multigraphed letters, and gas bill statements, should be eliminated from operating expenses as not incurred in public service operations but rather in the nature of merchandising and appliances, particularly where these expenses are nonrecurring, p. 118.

Expenses, § 19 — Credit association.

23. Payments to a retail credit men's association and other similar agencies should be eliminated from commercial expense on the ground that they are not incurred in public service operations, p. 118.

Expenses, § 19 — Luncheons, conventions, and travel.

24. Cost of credit men's luncheons, conventions, and travel should not be allowed as part of commercial expense, since such expenses are not incurred in public service operations, p. 118.

Expenses, § 80 — Merchandise and appliance operations — Salaries.

25. Salary of a public utility company employee based on the amount of time he spends with and devotes to merchandise and appliance operations should not be included in commercial expense, p. 118.

Expenses, § 80 — Merchandising — New business expense.

26. Expenses relating to merchandising and the sale of appliances should not be charged against ratepayers as a new business expense, since such expenses are not incurred in public service operations, p. 119.

Expenses, § 84 — Payments to parent company — Services.

27. Management fees formerly paid to a parent corporation, payment of which has ceased, should be disallowed as an operating expense in the

absence of a clear showing of value received in services for these fees, p. 119.

Public utilities, § 138 — Payment of dues, subscriptions, and membership fees.

28. It is not for the Commission to determine a public utility company's policy on the matter of paying dues, subscriptions, and membership fees in clubs, p. 120.

Expenses, § 48 — Dues — Subscriptions.

29. Payment by a public utility company for dues, subscriptions, and membership fees in golf and country clubs and other clubs and organizations should not be allowed as operating expense, p. 120.

Public utilities, § 138 — Payments for charitable purposes.

30. The Commission does not question a public utility company's policy in making donations to charity and contributing otherwise to worthy causes in the city where it operates, p. 120.

Expenses, § 46 — Charitable donations.

31. Expenditures by a public utility company for nonpublic utility purposes, such as charitable contributions, can be paid either out of profits or surplus or by the company's parent corporation, but are not proper charges to operation, p. 120.

Expenses, § 19 — Candy, flowers, conventions, clubs, and tickets.

32. Expenditures by a public utility company for such items as candy, flowers, convention expense, clubs and associations, tickets, shows, and benefits should not be included as a proper charge to the consumer, p. 122.

Expenses, § 92 — Regulatory expense — Amortization.

33. Allowances for regulatory expense were required to be amortized over a period of ten years, p. 122.

Expenses, § 118 — Uncollectible accounts.

34. Losses from uncollectible accounts should not be allowed as a charge against ratepayers when the company has the right to require sufficient deposits for its protection from all its consumers, p. 123.

Expenses, § 39 — Cost of natural gas — Division of transmission corporation.

35. A city gate rate established by the Commission for natural gas delivered to corporate affiliates by a natural gas transmission company should be used in determining the cost of gas in a city where the company operates its own distribution system, p. 125.

Depreciation, § 26 — Annual allowance — Consistency with accrued depreciation.

36. The Commission cannot approve a public utility company's policy of having a practically undepreciated rate base and charging a rate high enough to absorb an enormous annual depreciation expense, p. 125.

Depreciation, § 29 — Annual allowance — Experience.

37. One of the best tests known in determining the accurateness of a proper annual depreciation charge is the amount the company actually charges to the depreciation reserve each year for replacements necessary because of property retirements resulting from a depreciated condition, p. 126.

Return, § 101 — Natural gas distributing utility.

38. A return of 6 per cent on the fair value of property used and useful in distributing natural gas was held reasonable in a city which was growing

and prosperous, where the company occupied a strategic position in the matter of conducting a stable public utility business from which it would continue to earn profits under the rates established, p. 126.

Payment, § 53 — Penalty for slow payment.

39. A natural gas distributing utility was permitted to make an additional charge for failure to make prompt payment, p. 127.

Rates, § 375 — Natural gas — Minimum charge.

40. A natural gas distributing company was allowed to make a minimum charge of 50 cents per meter per month even though the consumer should not have used sufficient gas in such month to make the amount of the bill equal to such charge, p. 127.

[August 24, 1937.]

APPEAL *from city ordinance establishing natural gas rates; rates established by Commission.*

APPEARANCES: Hon. Marshall Newcomb, Roy C. Coffee, and Warren Collins of Dallas, and Walker, Smith and Shannon by O. K. Shannon of Fort Worth, for the Lone Star Gas Company; Hon. R. E. Rouer, City Attorney, Geo. C. Kimball, J. M. Floyd, and R. B. Young, Jr., Assistant City Attorneys, for the city of Fort Worth.

By the COMMISSION:

I. Statement of the Case and History of the Distribution System in Fort Worth — The Company's Affiliations

For the purpose of brevity in this opinion and order, the city of Fort Worth, Texas, will be referred to as the city, the Lone Star Gas Company as the company, and the Railroad Commission of Texas as the Commission.

July 31, 1935, the city council of the city at one of its regular meetings directed its city secretary to issue a notice summoning the company to appear before the council Wednesday, August 7, 1935, for the purpose of showing cause why a lower schedule of rates than those charged by the company for domestic gas at that time should not be put into effect. August 7, 1935, pursuant to such notice, the company appeared, presented, and filed an application with the city council requesting a change in its schedule of rates for natural gas and natural gas service. The application set forth various facts relating to and affecting the company's property and business in the city. The schedule of rates submitted by the company follows: [Schedule omitted.]

Instead of granting the company's application, the city passed Ordinance No. 1838, which put into effect the following schedule of reduced rates: [Schedule omitted.]

The billing date under this schedule was to be the date of delivery of the bill to the customer's residence or place of business. In the event the bill was not paid within ten days an additional charge of 11⅓ per cent was to be added to the rendered bill for failure on the customer's part to make prompt payment. A minimum charge of 50 cents per meter per month was

to be made, even though the customer did not use sufficient gas in such month to make the amount of the bill equal to the charge of 50 cents.

The schedule of rates which was in effect at the time follows: [Schedule omitted.]

A deduction of 10 per cent was allowed for payment of bill within ten days from date of monthly billing and a minimum charge of 50 cents net per meter per month was made.

August 13, 1935, the company filed with the Commission its petition of appeal from the action of the city council in failing and refusing to grant its application for a change in rates and the action of said city council in enacting and passing Ordinance No. 1838. The company prayed that the Commission permit it to put into effect the rates set out in its petition of appeal pending final hearing. This the Commission denied. The company's other prayer was that, should the Commission deny the right to put into effect the proposed schedule of rates set out in its application, the Commission enter an order suspending the rates prescribed by Ordinance No. 1838 pending final hearing and determination of the appeal, upon the filing by the company of a good and sufficient bond. This part of the appeal was allowed and bond was fixed at $175,000.

August 30, 1935, the company filed with the Commission its appeal and supersedeas bond in the aforesaid amount of $175,000 with the Hartford Accident and Indemnity Company as surety. October 11, 1935, a journal entry was made by the Commission, allowing the company's appeal, approving and accepting the bond aforesaid, and providing that the rates, charges, and rules set forth in Ordinance No. 1838 be suspended and superseded pending final hearing and determination of the cause, and further providing that the company's application for a supersedeas of existing rates pending appeal be refused.

January 6, 1936, the hearing was commenced in Fort Worth, Texas, before Honorable Olin Culberson, director of the gas utilities division of the Commission, and Honorable F. L. Kuykendall, then chief examiner of the division. The hearing was recessed January 10th until April 6th, from which date it was conducted continuously until June 17, 1936, on which date it was closed. During the hearing much testimony was introduced on the part of both the company and the city. The transcript comprises 5,531 pages and during the hearing 57 separate exhibits were introduced in evidence.

February 13, 1937, both the city and company submitted printed briefs and argued the case before the full Commission in its regular hearing room in the capitol building at Austin.

The distribution system operated in the city prior to 1909 in the sale of artificial gas. During that year natural gas was introduced into the system and has since that date been distributed in the city, though for a number of years thereafter artificial gas was manufactured and sold in addition to sale of natural gas. In 1924 the Midland Securities Company sold its capital common stock holdings in the Fort Worth Gas Company, operating in the city, to the Lone Star Gas Corporation, a Delaware corporation, the latter thereby acquiring

through such stock purchase more than 96 6/10 per cent of the outstanding common stock of the distributing company. The stock had a par value of $100 per share at the time of the transfer which, with 8,000 shares outstanding, gave a common stock figure of $800,000, of which the Lone Star Gas Corporation's holdings amounted to $773,000. During the year 1926 the capital common stock of the Fort Worth Gas Company was changed to no-par-value stock issued on the basis of 4 no-par-value shares for one of the old par-value shares. In 1931 the Fort Worth Gas Company was dissolved and the Lone Star Gas Company took over the assets of the old corporation and has since that date operated the distributing system in Fort Worth.

The common capital stock of the Lone Star Gas Company on December 31, 1935, was owned and controlled by the Lone Star Gas Corporation to the extent of 99 per cent or more. On the same date, in addition to its ownership and control of the Lone Star Gas Company, the parent corporation, by 100 per cent ownership of the common capital stock, controlled the following companies having gas operations in Texas:

Community Natural Gas Company, County Gas Company, Dallas Gas Company, Texas Cities Gas Company.

The holding company also, by ownership of 99 per cent, or more, of the common capital stock, controlled the following corporations of which only the first has operations in Texas:

Lone Star Gasoline Company, Guthrie Gas Service Company, Northwest Cities Gas Company, Council Bluffs Gas Company.

The Community Natural Gas Company owns and operates distribution systems in over 250 cities and towns in the state of Texas and purchases its gas at the city gates from the affiliated Lone Star Gas Company. The County Gas Company distributes gas in parts of the city of Dallas, Texas, its suburbs, and in a number of small towns in the county of Dallas. The Dallas Gas Company distributes in the city of Dallas. Both these companies purchase gas from the Lone Star Gas Company. The Texas Cities Gas Company owns and operates distribution systems in the cities of El Paso, Waco, Galveston, Paris, and Brenham, but purchases gas from the Lone Star only at the city gates of Waco and Paris.

The Lone Star Gas Company is primarily a gas gathering, production, and transmission company, and operates only one distribution system in Texas, and that in the city of Fort Worth, as mentioned above. The company owns and operates over 4,000 miles of transmission pipe line and secures its gas from 40 gas fields. From its 1935 Annual Report to the Commission total sales, domestic and industrial, in Texas were stated to be 36,699,406 thousand cubic feet.

II. Rate Base

Mr. E. A. Steinberger, witness for the company, with whom Messrs. P. McDonald Biddison and Ed. C. Connor collaborated, introduced and sponsored Exhibits 1 and 1A, both elaborate in their detail of the property used in the city. Mr. Steinberger prepared the inventory, jointly with Mr. Biddison, worked up the unit costs which he applied to the in-

ventory, and prepared the figures on working capital. Mr. Connor prepared the information with reference to the collateral construction costs. Mr. Marvin Nichols of the firm Hawley, Freese and Nichols, on behalf of the city, sponsored Exhibit 14 which sets out the city's inventory of the company's property used in the distribution system. The estimates of these two witnesses follow: [Table omitted shows total property according to company $7,860,624.58 and according to city $5,398,882.05.]

Exhibit 1 showed five items detailing meters and their installation while Exhibits 14 gave similar information in only three accounts. In order that the two exhibits be made comparable with reference to this equipment, all the items have been combined into one heading appearing under the title of All Meters and Installation, Including Industrial.

Later the engineers for the city and company agreed upon a valuation of a number of items which were set out in Exhibit 13. Certain revisions were also made in the figures presented in Exhibits 1, 1A, and 14, the company setting out its revised list in Exhibit 32 and the city in Exhibit 23. The revised estimates of the two were as follows:

REPRODUCTION COST NEW ADJUSTED FOR AGREED ITEMS

	Company's	City's
Land	$62,324.00	$51,373.46*
Leaseholds	1,529.55	1,529.55
Rights of way	1,073.91	1,073.91
General Office Structures	275,966.49	163,918.95*
District Regulator Station Structures	11,932.24	11,932.24
Other Distribution System Structures	75,144.97	75,144.97
District Regulator Station Equipment	72,782.79	72,782.79
Distribution Line Equipment	3,668,652.45	3,005,091.15
Service Line Equipment	450,345.46	327,588.21
Paving Cut and Replaced	260,760.59	260,760.59
Industrial Meter Equipment	71,151.48	71,151.48
Special Domestic Meter Equipment	5,531.42	5,531.42
Meters and Installations	578,727.73	578,727.73
House Regulators	2,585.19	2,585.19
Other Distribution System Equipment	136,532.74	96,423.27
Subtotal	$5,675,041.01	$4,725,614.91
Omissions	.....	15,082.56
Total Physical	$5,675,041.01	$4,740,697.47
Preliminary and Organization	$144,000.00	$35,555.23
Engineering and Supervision	290,000.00	206,563.38
Administrative and Legal	179,000.00	94,813.95
Taxes during Construction	43,000.00	.....
Interest during Construction	493,100.00	211,701.29
Total Collateral Costs	$1,149,100.00	$548,633.85
Cash Working Capital	169,700.00	88,331.82
Going Concern Value	761,000.00	.....
Total Nonphysical	$930,700.00	$88,331.82
Grand Total	$7,754,841.01	$5,377,663.14

* The city included only two thirds the value of Land plus one fourth the value of city gate station sites and two thirds the value of General Office Structures.

The difference of $2,461,742.53 between the company and the city in their first estimates was cut to $2,377,177.87, this figure being the difference after their revisions and agreement on certain items hereinafter discussed.

Land

The engineers agreed upon the value of land owned by the company, the amount agreed upon being $62,663. The evidence, however, showed that only two-thirds of the office building site is devoted to public service operations. The evidence also discloses that the distribution system uses the city gate stations and as a result one-fourth the value of the station sites should be allocated to the property used in distributing gas within the city. After taking into consideration the above-discussed adjustments, we find the correct value of land devoted to public service to be $51,373.46, which is the value we fix for this item as being fair and reasonable.

Leaseholds and Rights of Way

The company and city engineers agreed upon values of $1,529.55 and $1,073.91 for leaseholds and rights of way, respectively. We find these values to be fair and reasonable.

Office Building

Estimates and evidence as to reproduction cost new of the office building were submitted by Mr. Harry B. Friedman, witness for the city, and Mr. Hal C. Dyer on behalf of the company. Mr. Friedman stated that 7 1/2 per cent should be allowed for contractor's profit and one per cent for contractor's bond. In arriving at his estimate of $245,878.42, he did not include an architect's fee of 5 per cent which he said should be provided for somewhere in the reproduction of the property used by the company. We agree with this witness in not allowing an architect's fee as a specific item to be included in the office building cost, since we feel that this cost has been more than amply taken care of in our allowance for engineering and supervision discussed *infra*. The company's witness included in his estimated cost 7 per cent for contractor's profit, one per cent for contractor's bond, and 5 per cent for architect's fee in arriving at the figure of $275,966.49. He stated that the architect's fee of 5 per cent would amount to $13,141.26, which amount we are deducting from his estimate in order to arrive at comparable figures of these two witnesses. This deduction reduces Mr. Dyer's estimate to $262,825.23. Both witnesses are competent contractors and have had long years of experience in this line of work and it is difficult for us to choose between them in arriving at a fair value for this item. An equitable method, it seems to us, is to take the average, exclusive of the architect's fee, of the two figures which gives $254,351.83 as the value to be attributed to the office building and inasmuch as only two thirds of the building is devoted to the rendition of public service we are allowing $169,567.88 for this item.

District Regulator Station Structures, Other Distribution System Structures, and District Regulator Station Equipment

The company and city agreed up-

on the values of the following items which values we accept as fair and reasonable:

District Regulator Station Structures	$11,932.24
Other Distribution System Structures	75,144.97
District Regulator Station Equipment	72,782.79

Distribution Line Equipment

The engineers for the company and city were further apart on their estimates of distribution line equipment than any other item, the difference originally amounting to almost three quarters of a million dollars. An agreement, however, was subsequently reached as to the value of main line fittings, gate valves, main line taps, special construction, and valve pits, all being included in distribution line equipment, the agreed value for all these items being $471,941.86. Other costs not agreed upon included in distribution line equipment were pipe, handling and checking, unloading, hauling and stringing, welding, wrapping, painting, concreting mains, disposal of excess earth, laying and testing, blocking material, jointing material, miscellaneous line costs, trenching, backfilling, and omissions and contingencies or slack and waste. Because of the great variance in figures for all these costs it becomes necessary to discuss each of them separately.

(1) Pipe

The company estimated pipe at $1,620,217.89 and the city at $1,587,487.49. The difference between the two of $32,730.40 is the result of variations in the price of cast-iron pipe used by the company and the city. The evidence clearly reflects that this type of pipe could be purchased, and as a matter of fact had been purchased during the year by the company, at prices practically the same as those used by the city. We find, therefore, that the estimate of $1,587,487.49 made by the city is a reasonable amount for pipe.

(2) Unloading, Hauling, and Stringing

[1] The company shows $49,319.38 and the city $31,812.59 as its allowance for the cost of unloading, hauling, and stringing of pipe. Mr. P. McDonald Biddison, one of the company's engineers, in arriving at his estimate of these costs, stated that pipe would be unloaded from cars at points adjacent to the railroad right of way from which points the pipe would later be picked up by truck and hauled to the job. He used only six unloading points in the city which fact materially increased the cost of hauling over that of a method utilizing a larger number of unloading points and thereby decreasing the length of the haul from the railway right of way to the job. The record discloses that the city water department had been using approximately twenty unloading points for its pipe in the city, and that its average haul from such points to points of construction was not greater than one mile. In striking contrast is Mr. Biddison's estimated average haul of 4.2 miles for zone 11 and an average haul for all eleven zones of approximately 2 miles. In none of the eleven zones did he have an estimated haul of less than one mile. Standing out in bold relief also is Mr. Biddison's method of unloading pipe from the car to the

ground and subsequently loading on trucks, when the record reflects that a greater part of pipe, particularly the large size pipe, could be loaded directly on the trucks from the cars, thereby eliminating the additional cost of placing the pipe on the ground adjacent to points of unloading and later loading on trucks. We believe that in rejecting Mr. Biddison's method we are simply refusing to be governed by purely hypothetical estimates when facts are available to guide us. Mr. Chief Justice Hughes in Lindheimer v. Illinois Bell Teleph. Co. (1934) 292 U. S. 151, 164, 78 L. ed. 1182, 3 P.U.R.(N.S.) 337, 345, 54 S. Ct. 658, succinctly stated this idea when he said: "Elaborate calculations which are at war with realities are of no avail."

Mr. Marvin C. Nichols, engineer for the city, in making his allowance, produced studies of hauling and stringing pipe costs made by him in other cities and towns, and as an additional check he secured prices from hauling contractors in the city of Fort Worth, which the company did not do. These bid prices were materially lower than the Biddison estimates. For the reasons above discussed we agree with the city's estimate of $31,812.59, and find it to be the proper amount to be allowed for unloading, hauling, and stringing pipe.

(3 and 4) Welding and Wrapping

The company estimated welding costs at $4,809.09 and the city $4,914.65. We agree with the city's estimate and find that $4,914.65 is a fair value for welding costs.

We have combined the estimated costs of spot wrapping and straight wrapping in arriving at $178,695.50 for the company's estimate and $146,436.04 for the city's calculation. Mr. Nichols, in his testimony, stated that his estimate did not include wrapping of dresser couplings on cast-iron pipe. He stated, however, that such an allowance would probably be necessary, his reason for the omission being that in making 350 inspections at various points in the city he found a number of couplings not wrapped. We think the city's estimate for this cost should be increased by the sum of $15,362.51, the additional cost of dresser coupling wrapping. This addition brings the city's estimated cost to $161,798.56, which amount we find to be fair and reasonable, inasmuch as the evidence discloses that Mr. Biddison used wrapping material prices furnished him by Mr. E. A. Steinberger. The evidence also shows that the company actually purchased, during the year of the inquiry, wrapping materials including alcohol, muslin, and cement for approximately one-half the cost set up by Mr. Steinberger and used by Mr. Biddison. Our finding is further supported and borne out by the fact that Mr. Nichols' estimate was under that of the company's engineers only on spot wrapping in which they used the higher material costs.

(5 and 6) Concreting Mains and Painting

The company's estimate of the cost of concreting mains was $751.52 as compared with the city's estimate of $791.07 for the same item. We find that $771.29 is the fair value of the cost of concreting mains.

On the estimated cost of painting the city's figure exceeds that of the company. The city showed $15,847.24 as against $13,947.06 for the company. We find that $14,897.15 is the fair and reasonable value for painting costs.

(7) Laying and Testing

[2] The estimates of the company and city for the cost of laying and testing are $231,040.31 and $254,047.77, respectively. Mr. Nichols in his estimate of this item included Bell-hole excavation in the amount of $32,438.14, which item Mr. Biddison included in his estimated cost of excavation and backfill. It seems more logical to treat the cost of Bell-hole excavation as part of the cost of excavation and backfill rather than to treat it as Mr. Nichols did. We are, therefore, deducting $32,438.14 from the city's figure in order that the component costs making up the two estimates may be made comparable and arrive at a cost of $221,609.63 as the city's corrected estimate. There is considerable testimony in the record regarding methods to be used in laying and testing pipe and arriving at a proper cost. We find that $226,324.97 is the fair and reasonable allowance for this cost.

(8) Blocking Material

The company estimated the total cost of blocking material to be $3,931.18 for which item the city made no specific allowance. We have carefully studied the testimony with reference to this cost and believe the record clearly shows the necessity for such costs. We find $3,931.18 to be a fair and reasonable amount, which we allow.

(9) Jointing Material

[3] Estimates for jointing material costs were $12,202.11 for the company and $9,947.44 for the city. The reason for this difference lies primarily in Mr. Nichols' failure to include any costs for blocking material on bell and spigot pipe. The record clearly shows that the use of blocking material facilitates this type of work though it might be possible to dispense with such material. For this reason we are taking the company's estimate of $12,202.11 as fair and reasonable in making the allowance for blocking material on bell and spigot pipe. This allowance is not a duplication of the costs of blocking material discussed under that heading.

(10) Hauling Away Excess Earth

[4] The company originally showed $74,390.30 as the estimated cost of hauling away excess earth but later revised this figure and reduced it to $47,514.09. The city made no separate allowance for this item. The city's engineering witness testified that a sufficient allowance had been made for this cost in his miscellaneous line costs item, in which he made specific provision for clean-up of excess earth. This same witness stated, however, that the city's miscellaneous line costs did not include the cost of hauling away broken concrete and asphalt from paving actually cut and replaced, and that $12,355.96 should be set out separately to take care of such costs, which he had not included in miscellaneous line costs. In the allowance made by Mr. Biddi-

son, it was shown that the company made a study of approximately 13,000 yards, but in arriving at unit costs excluded all jobs on which there was no excess earth to be removed. The result of this method was to reduce the 13,000 yards to 8,972 yards, all on jobs requiring removal of excess earth. Obviously, such a method is fallacious in that the percentages are higher than they would be if all jobs were used. We are allowing $12,500 as a fair and reasonable cost for this item.

(11) Excavation

[5] The company's estimated excavation cost was originally $727,331.50 as against $274,513.91 estimated by the city. It is necessary, however, to add to the city's estimate $32,438.14 for excavation of Bellholes, which amount Mr. Nichols included in his estimated cost of laying and testing, discussed under that head, and which we excluded from laying and testing costs. This addition brings the city's total up to $306,952.05, as compared with the company's total of $689,074.10 resulting from a correction of $38,257.40 made in the original figures. (Exhibit 32, p. 3.) Mr. Nichols' hand machine ratio on his machine allowance at first blush appears to be high, but he later reduced his original machine percentage from 64 per cent to 59 per cent on a lineal foot basis, and to 55.3 per cent on a cubic yard basis. He also included 8 per cent for skips in his allowance. Mr. Biddison included his allowance for skips in setting up his machine excavation crews. His machine percentage is abnormally low as the result of his having treated all paving excavation, regardless of when the paving had been constructed, as 100 per cent hand excavation. He stated in connection with this matter that he had made no investigation as to whether paving had been put in prior to or after construction. Cases are legion holding that it is improper to set up hypothetical costs for paving cut when the company's history showed no such cost incurred. Mr. Justice Day in Des Moines Gas Co. v. Des Moines, 238 U. S. 153, 171, 59 L. ed. 1244, P.U.R.1915D, 577, 589, 35 S. Ct. 811, said in connection with this question:

"As to the item of $140,000, which, it is contended, should be added to the valuation, because of the fact that the master valued the property on the basis of the cost of reproduction new, less depreciation, and it would be necessary in such reproduction to take up and replace pavements on streets which were unpaved when the gas mains were laid, in order to replace the mains, we are of the opinion that the court below correctly disposed of this question. These pavements were already in place. It may be conceded that they would require removal at the time when it became necessary to reproduce the plant in this respect. The master reached the conclusion that the life of the mains would not be enhanced by the necessity of removing the pavements, and that the company had no right of property in the pavements thus dealt with, and that there *was neither justice nor equity in requiring the people who had been at the expense of paving the streets to pay an additional sum for gas because the plant, when put in, would have to*

be at the expense of taking up and replacing the pavements in building the same. He held that such added value was wholly theoretical, when no benefit was derived therefrom. We find no error in this disposition of the question." (Italics supplied.)

Mr. Justice Cardozo in Dayton Power & Light Co. v. Ohio Pub. Utilities Commission (1934) 292 U. S. 290, 311, 78 L. ed. 1267, 3 P.U.R. (N.S.) 279, 294, 54 S. Ct. 647, said in citing the Des Moines Case:

"The cost in imaginary conditions of cutting and restoring pavements was not an increment of value."

We believe the authorities quoted above clearly state the law as to excluding estimates of paving cut and replaced in reproducing the property when, according to the company's history and experience, such costs were not actually incurred.

It is not amiss here to quote from Bonbright, Valuation of Property (1937) 1119, in which the author in favoring original cost as being only secondary evidence of replacement cost, said:

"It (theory) avoids the necessity of a meaningless compromise between two conflicting bases of rate control. And it is by no means inconsistent with the accepted practice of giving much weight to actual recent outlays proved by the company's accounting records, as distinct from fanciful guesses of hypothetical costs submitted by biased experts in return for generous fees."

Mr. Elsworth Long, witness for the city, a man of many years' experience in excavation work in the city, testified that 52½ per cent of the excavation in the company's so-called "rock area" could be done by machine. In this same area Mr. Biddison classified all excavation as hand. We have studied with care all the testimony in connection with excavation costs and, taking into consideration all the facts above discussed, we find that the proper hand and machine ratio to be applied to this plant should be 50 per cent hand and 50 per cent machine. We find further that 400,000 cubic yards is a fair and reasonable allowance for the quantity of earth excavated.

Mr. Nichols used average prices of 91 cents per cubic yard for hand excavation, 32.2 cents per cubic yard for machine, $2 per cubic yard for loose rock excavation, and $3.25 for solid rock excavation.

Mr. Biddison divided the city into 11 zones and arrived at various costs for excavation. In arriving at his so-called base rate on hand excavation, he made a study of some forty-three jobs and found a man-hour performance of .4225 cubic yards per hour, which figure he arrived at by arbitrarily reducing actual crew performance 20 per cent. Adding the reduction made by him to .4225, we arrive at a figure of .5280 cubic yards per man-hour as compared with .5540 cubic yards per man-hour used by Mr. Nichols. It is also clear from the record that some of the jobs included in Mr. Biddison's study in arriving at his so-called base hand excavation rate were actually taken in zones 5 and 6, in which zones he added 20 per cent and 40 per cent, respectively, over the base cost. The record also reflects that the location

selected for study by Mr. Biddison in attempting to arrive at an average or base cost were the worst possible types of locations and were in nowise typical. Further, Mr. Long testified that he could excavate and *backfill* earth and *loose rock* for $1 per cubic yard. Mr. Nichols used 91 cents for hand excavation and 28 cents for backfill, or a total for the two of $1.19 per cubic yard of earth as compared with $1 per cubic yard estimated by Mr. Long, who included loose rock and for which Mr. Nichols estimated an extra cost of $2 per cubic yard.

Mr. Long further stated that he could do, *and had done,* machine excavation and *backfill* in Fort Worth for 35 cents per cubic yard. This estimate, considered with that of 42.9 cents made by Mr. Nichols, clearly indicates that this type of work can be done approximately 18 per cent cheaper than Mr. Nichols estimated. In light of the record and the facts above discussed, we conclude that Mr. Nichols' excavation costs are entirely adequate, fair, and reasonable.

(12) Backfill

The company showed originally $172,704.48 for cost of backfill, a figure later revised downward to $170,317.51. The city showed $70,526.13 for this same cost. From the company's Exhibit No. 28, in which Mr. Steinberger developed an average cost of backfilling for both hand and machine, it was developed that the study was primarily one of hand excavation in that the use of equipment was lacking. (Exhibit 28, p. 2.) As stated above under our discussion of excavation cost, Mr. Long testified that he could do, and had done, machine excavation and backfill in Fort Worth for 35 cents per cubic yard. For this reason it seems to us that 28 cents per cubic yard for hand backfill and 10.7 cents per cubic yard for machine backfill, used by Mr. Nichols, is more than adequate. We are using the same ratio of 50 per cent hand and 50 per cent machine which we used in excavation for this item, and we adopt Mr. Nichols' unit costs in arriving at a total allowance of $77,400 as fair and reasonable.

(13) Miscellaneous Line Costs

The city estimated $54,177.28 for miscellaneous line costs and the company nothing. This item included allowances for watchman, barricades, lanterns, crossings, ice, cleaning up, hauling excess earth when required, repairs to water, sewer, and telephone lines, and other small items which the city's engineers thought had not been specifically provided for otherwise. We believe the city's estimate is proper and we allow the amount as fair and reasonable.

(14) Handling and Checking

The company estimated $81,184.46 for handling and checking cost as against $67,099.70 by the city. The main difference between the company and the city in their estimates lies in the fact that Mr. Nichols allowed only 3 per cent for the handling and checking of pipe and 4 per cent on all other items, whereas Mr. Biddison used a straight 4 per cent on the entire property. We believe the amount estimated by the city is entirely suffi-

cient to cover handling and checking costs, since in our opinion, a great proportion of the pipe would be hauled direct from the railroad cars to the job, and consequently, there would be very little stores expense in connection with this item except purchasing, checking, and routing of cars.

(15) Omissions and Contingencies

[6] The company originally set $90,838.58 as the proper estimated cost for omissions and contingencies, or slack and waste. Subsequently, however, the company in Exhibit No. 32 reduced its figure to $77,577.13. The city allowed only $15,500.98 for the same item. Mr. Steinberger said, ". . . I wish to say I think this is the most complete inventory I have ever prepared, for the reason that I have been familiar with this property since 1928." The thoroughness with which both the company and the city inventoried the property leads to the inevitable conclusion that very little, if any, property of the plant has been omitted. We find that an allowance of one-half of one per cent is fair and reasonable. By applying this percentage to the total items going to make up distribution line equipment, exclusive of the agreed items, set out below, we arrive at a figure of $12,936.33 for omissions and contingencies, which we allow.

Summary

By way of summation, we find the distribution line equipment to consist of the following items and amounts:

Handling and checking	$67,099.70
Unload, haul, and string	31,812.59
Welding	4,914.65
Wrapping	161,798.55
Painting	14,897.15
Concreting mains	771.29
Trench excavation	331,950.00
Trench backfill	77,400.00
Hauling away excess earth	12,500.00
Laying and testing	226,324.97
Blocking material	3,931.18
Jointing material	12,202.11
Miscellaneous line costs	54,177.28
Subtotal	$999,779.47
Pipe	1,587,487.49
Subtotal	$2,587,266.96
Omissions and contingencies (Slack and waste)	12,936.33
Total	$2,600,203.29
Agreed items	471,941.86
Total	$3,072,145.15

Service Line Equipment

[7] For service line equipment the company arrived at an estimate of $450,345.46 as compared with the city's estimate of $327,588.21. Mr. Biddison, in making his study on which the company's estimate was bottomed, took some 1,949 services put in as piecemeal construction. As discussed *infra,* since there are no adequate and complete historical records available in this case, we necessarily must reject Mr. Biddison's hybrid or mongrel method of purporting to reproduce the plant new, and in so doing, resort to piecemeal construction in arriving at some of his unit costs. On other occasions we have definitely rejected this method of valuation in the absence of historical records. Municipal Gas Co. v. Wichita Falls (Tex. 1935) 9 P.U.R. (N.S.) 33; Texas Cities Gas Co. v. Waco, Gas Utilities Docket No. 101, June 18, 1935.

Mr. Nichols, on the other hand, is undoubtedly too low in his allowance for tapping mains, in that he contended that a crew of one man and a helper could make four taps in cast-iron pipe per hour. We conclude after careful weighing of all the testimony that $388,966.84 is a fair and reasonable allowance for service line equipment.

Paving Cut and Replaced

The company made an allowance of $278,145.60 for the cost of paving cut and replaced. The city allowed for the same item only $243,375.58. Inasmuch as the parties subsequently agreed upon $260,760.59 as a fair value for this item, we adopt the agreed figure.

Industrial Equipment

The company and city originally valued industrial equipment at $76,140.52 and $66,162.43, respectively. Later an agreed value of $71,151.48 was set and this estimate we find to be reasonable.

Special Meter Equipment

The company calculated a value of $6,041.43 for special meter equipment as against $5,021.40 by the city. An agreed value of $5,531.42 was reached, which we adopt as fair and reasonable.

Meters and House Regulators

The company's figure for meters was shown to be $584,340.35 and that of the city $585,715.24. (Exhibit 13, p. 3.) The parties agreed on a value of $578,727.73. Engineers for the company and the city produced estimated values for house regulators of $2,746.83 and $2,423.54, respectively, but later compromised upon a value of $2,585.19. We concur with representatives of the parties in the two agreed valuations and hold them to be reasonable and proper.

General

Furniture and Fixtures

The company made an allowance of $43,491.05 for furniture and fixtures and included in this item law books valued at $1,200. For the same item the city made an allowance, exclusive of law books, of $40,293.75. Mr. Nichols, in omitting this item, stated that his reason for so doing was that he made ample allowance for such items as law books in his estimate of administrative and legal expense during construction. We believe from the evidence that $40,293.75 is the proper allowance for the value of furniture and fixtures and so find. This amount undoubtedly includes furniture and fixtures used in nonpublic utility operations for which no deduction has been made.

Tools and Construction Equipment Shop Equipment

Representatives of the company and city agreed upon the following items, in which agreement we are in accord and allow the same as fair and reasonable:

Tools and construction equipment	$21,440.97
Shop equipment	27,762.51

Automobiles

The company made an allowance of $45,835.51 for automobiles as against only $6,926.04 by the city. The discrepancy here lies in the dif-

ferent methods used by the parties in arriving at their values. The company's allowance was based upon reproduction cost new 100 per cent, while the engineers for the city used the book value as the basis. We concur in this application made by the city and find the value of $6,926.04 for automobiles as fair and reasonable.

A total of all the items under the heading of "General," discussed above, amounts to $96,423.27.

Preliminary and Organization Expense

[8–10] Mr. Connor in his allowance of $144,000 for Preliminary and Organization Expense used 2½ per cent of the physical property value. This expense included such items as (1) remuneration of promoters, (2) preliminary and engineering reports on a tentative layout of the system with a preliminary cost estimate, (3) market analysis, economic survey, and study of a gas supply costs, (4) estimates of costs of gross earnings, operating expenses, and probable net return, (5) cost of preparing and distributing a prospectus and discussion of the project, (6) cost of legal advice with reference to corporate and franchise requirements, (7) costs incidental to securing a franchise, (8) cost of charter fees, (9) cost of printing and engraving stock certificates and bonds, (10) cost of Federal Securities Tax, (11) cost of preparing mortgage and trust indenture, (12) cost of certification of expenditures and finally, as though the foregoing were not sufficient, (13) "The cost of all fees and other expenditures incident to organizing the corporation and putting it in readiness to do business."

As we have recited earlier in this opinion, the distribution system in Forth Worth is operated by the company. The system is not a separate corporation but only a so-called division of the Lone Star Gas Company, owned and controlled almost 100 per cent by the Lone Star Gas Corporation, which, as we have previously noted, also owns and controls other corporations distributing gas in the state of Texas. A large number of such systems are served at the city gate by the company. Most of the services required in Mr. Connor's estimate are those of technicians and there is no question but what the legal and engineering staffs of the Lone Star group are available to render such services when and if required by any of the affiliated group.

Of the thirteen separate costs set out by Mr. Connor six or seven are based on the erroneous assumption that the system would be incorporated. This assumption is not only highly conjectural and hypothetical but is arbitrary and apparently was made in complete disregard of facts as they actually exist. This witness' manner of flying directly into the teeth of cold facts and his utter disregard of them in his calculations require us again, at the possibility of being trite, to quote Mr. Chief Justice Hughes' statement in the Lindheimer Case, *supra*, at p. 345 of 3 P.U.R.(N.S.), when he said: "Elaborate calculations which are at war with realities are of no avail." We believe the theory announced by the Supreme Court in McCardle v. Indianapolis Water Co. (1926) 272 U.

S. 400, 71 L. ed. 316, P.U.R.1927A, 15, 47 S. Ct. 144, to the effect that in estimating the value of a particular plant resort cannot be had to an estimate of a plant or system different from the one in question, is peculiarly applicable here. In the reproduction of the system in the city, the regulatory authority would not be free to base its valuation on a system materially different from the one now in operation. Why should the company be allowed to reproduce the system as a corporation when it has been operating for years as only a division of a large transmission corporation? If the present method of distributing gas in the city could to advantage be improved or economies be effected by making the division of the company a separate corporation, we take judicial knowledge of the fact that the interested parties of the affiliated group would be the first to recognize the desirability of incorporating the system. It is a fact also, that the Fort Worth Gas Company, a corporation, controlled through stock ownership by the Lone Star Gas Corporation, was dissolved and taken over and operated as a distribution system by the company. We cannot allow as legitimate costs expenses incident to an assumed incorporation of the system. By this statement we do not want to be understood as excluding all proper legal expenses incident to reproduction of the plant as part of the company's system.

Most of the engineering costs assumed by Mr. Connor in market analysis and a study of the gas supply could be either wholly dispensed with or materially reduced. We believe also that costs in connection with market analysis and securing a franchise from the city have been much exaggerated. In a city the size of Fort Worth with a progressive citizenry such as it has, there can be no doubt but that the city would coöperate in seeing that it was served with natural gas, and the citizens would be anxious to be served this commodity.

In addition to the fallacies of Mr. Connor's assumptions, pointed out above, he further assumes that the plant would be constructed by an outside concern and that other services would also come from sources outside the affiliated group. The record discloses that when any member of the Lone Star group has problems of any moment, such member secures the valuable services of the legal, engineering, and accounting staffs of the group. Most of these men are either employed by some member of the Lone Star System or are retained by it. We do not agree that all of the necessary preliminary and organization expense should be greatly enhanced by assuming that outsiders would have to be employed, but rather assume, in line with the facts, that wherever possible, services of the regularly employed or retained personnel would be used. Furthermore, the record does not disclose any proof that the items included by Mr. Connor were incurred in connection with the construction of the Fort Worth plant. Dayton Power & Light Co. v. Ohio Pub. Utilities Commission, *supra*.

Mr. Nichols, in reaching the estimated costs under discussion used three-fourths of one per cent of the physical plant. This figure was $35,555.23, which we think might be reduced had he based his costs on the

assumption that most of the work would be done by the personnel of the affiliated group. We find that $36,000 is sufficient to cover the cost of preliminary and organization expense.

Administrative and Legal Expense

[11] Estimates of Administrative and Legal Expense were made on the basis of 3 per cent and 2 per cent of the physical plant by the company and the city, respectively. Most of the reasons stated above under discussion of Preliminary and Organization Expense are applicable here. In view of the further fact that the company spread construction over a 3-year period instead of taking it wholesale, we think 2 per cent of the physical plant, or $97,193.93, is adequate for this cost.

Engineering and Supervision

[12, 13] The company calculated cost for engineering and supervision at 5 per cent of the physical property less the value of lands, leaseholds, rights of way, and general items, while the city used 4½ per cent for the same item. Mr. Nichols testified that in his calculations he assumed the company would employ outsiders to do the work rather than resort to the services of the company's engineering personnel. In answer to the question as to the method usually pursued in the construction of distribution systems, he said, "Generally, where it is an affiliated company, they draw on the engineering staffs of the affiliated companies." In answer to the question as to what the cost would be where the company used the services of the affiliated group's personnel, he said, "I would consider that the actual cost of that service, on the assumption which you have made, would be about 3 per cent of the value of the property as set out under Item C on page 1."

Mr. Wesley F. Wright, general manager of the Fort Worth division of the company, testified that from July 1, 1931, to the present time it has been the company's policy to capitalize 2 per cent of the gross cost of construction for engineering and supervision. From January 1, 1928, to June 30, 1931, the company followed the policy of capitalizing for this cost at the rate of 1.41 per cent of the gross construction costs. The average for the 8-year period from January 1, 1928, to December 31, 1935, was 1.83 per cent of the direct structural costs.

From the testimony of Messrs. Nichols and Wright, set out above, the following facts stand out prominently: First, when a member of an affiliated group of companies requires engineering and supervision work, the member utilizes the services of the group staff of engineers. Second, that it is the policy of the members of the Lone Star group to resort to the engineering staff of the affiliated companies when such services are required. In other words, this group follows the usual policy in resorting to the services of technicians employed or retained by the group or the members thereof. Third, that under the settled policy of the company since 1928, the average percentage of direct costs capitalized for engineering and supervision was 1.83 and that the percentage capitalized up to June 30, 1931, was less than 1½.

In connection with Collateral Construction Costs, Mr. Justice Cardozo stated in Dayton Power & Light Co. v. Ohio Pub. Utilities Commission (1934) 292 U. S. 290, 309, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 293, 54 S. Ct. 647:

"The appellant complains of the refusal to make allowance for organization or preconstruction costs. There is no evidence that any were incurred, though this of itself is indecisive. . . . It is conjectural whether they would be incurred in the hypothetical event of a reproduction of the business, and, if incurred, in what amount. The appellant's position as a member of an affiliated system would have a tendency to reduce such expenses to a minimum. We think the ruling is supported by decisions of this court. . . ."

And, at p. 310, the court said:

"The appellant complains also of the failure to include the hypothetical expense of financing the business as part of the cost of reproduction.

"Considering the absence of evidence that any such expense had been incurred when the business was established and the uncertainty that it would be incurred if the plant were destroyed and reproduced, we think this item under recent decisions was properly rejected as remote and conjectural. . . . We are to remember that the cost of reproduction is a guide, but not a measure. Los Angeles Gas & E. Corp. v. California R. Commission, 289 U. S. 287, 77 L. ed. 1180, P.U.R.1933C, 229, 53 S. Ct. 637.

The company through its witness Mr. Connor has failed, we think, to establish facts on which to base a figure at 5 per cent. We think the company's position in this respect is on all fours with situations discussed by the Supreme Court in the language used in the following three cases. In Lindheimer v. Illinois Bell Teleph. Co. (1934) 292 U. S. 151, 175, 78 L. ed. 1182, 3 P.U.R.(N.S.) 337, 352, 54 S. Ct. 658, the court said in connection with "elaborate estimates":

"The company has had abundant opportunity to establish its contentions. In seeking to do so, the company has submitted *elaborate estimates and computations,* but these have overshot the mark. Proving too much, they fail of the intended effect." (Italics supplied.)

In connection with the company's responsibility in presenting facts the following two quotations are pertinent. In Knoxville v. Knoxville Water Co. (1909) 212 U. S. 1, 18, 53 L. ed. 371, 29 S. Ct. 148, Mr. Justice Moody said:

"On the other hand, the companies to be regulated will find it to their lasting interest to furnish freely the information upon which a just regulation can be based."

In Simpson v. Shepard (Minnesota Rate Cases [1913]) 230 U. S. 352, 466, 57 L. ed. 1511, 33 S. Ct. 729, 48 L.R.A.(N.S.) 1151, Ann. Cas. 1916A, 18, Mr. Justice Hughes said:

"It may be said that this would have been a very difficult matter but the company, having assailed the constitutionality of the state acts and orders, was bound to establish its case, and it was not entitled to rest on expressions of judgment when it had it in its power to present accurate *data* which would permit the court to draw the right conclusion."

In the Lindheimer Case, *supra,* at p. 169 of 292 U. S. (3 P.U.R.(N.S.) at p. 348) the court, through Mr. Chief Justice Hughes, said:

"The calculations are mathematical but the predictions underlying them are essentially matters of opinion. They proceed from studies of the 'behavior of large groups' of items. These studies are beset with a host of perplexing problems. Their determination involves the examination of many variable elements, *and opportunities for excessive allowances,* even under a correct system of accounting, are always present. The necessity of checking the results is not questioned. *The predictions must meet the controlling test of experience.*" (Italics supplied.)

We realize that in dealing with engineering and supervision, as well as other collateral construction costs, that the company and even the regulatory body are likely to assume too readily the existence and validity of such costs. Here we do not question the existence of such costs, except taxes during construction discussed below, though we do question some of the company's methods of calculation. We believe we are adhering to the law as enunciated by the cases above cited and quoted from when we require some sort of factual basis for calculation of the amounts rather than relying upon uncertain and purely hypothetical assumptions and calculations.

In the testimony of the company's two witnesses we have the incongruous and ludicrous situation of Mr. Wright's hard facts, as practiced by the company, diametrically opposed to and irreconcilably in conflict with Mr. Connor's elaborate, highly conjectural, hypothetical, and excessively fantastic calculations. We have no hesitancy in choosing between the two. We do think, however, that the percentages applied by the company are somewhat lower than would be the case in wholesale reproduction, while at the same time we do not question the soundness of the company's present operating practice. In view of the facts that this type of cost can be had for 3 per cent and the experience of the company in the capitalization of the item at much lower percentages, testified to by Mr. Wright, we find that 3 per cent of the total physical properties less the value of land, leaseholds, rights of way, and general property is adequate and reasonable. This percentage gives an amount of $141,278.89. In making our finding of this amount, as well as the amounts for other collateral construction costs, we are mindful of the fact that the company is entitled to these costs and our desire is to make such allowances as will be fair and equitable to both the company and the city.

Taxes during Construction

[14] The company showed $43,000 for estimated taxes during construction for which item the city made no allowance. The record discloses that in Tarrant county and in the city of Fort Worth it is the policy of the city, the county, the state, and the taxing officers not to levy taxes on work under construction. In answer to the question as to whether he had not departed from custom of the community in assuming the company would incur a cost for taxes during construction, Mr. Connor said that he was. He

was asked, "Have you ever seen or heard of any charges of any kind where any taxing authority here ever made any charge on any property that was not in operation?" Mr. Connor answered, "Well, I don't know."

Mr. Wright testified that January 1, 1931, the company had work in progress in the amount of $12,871, but when asked to produce figures for the same item for subsequent years he failed to do it. Evidence was adduced also to show that the company's policy was not to begin any construction jobs which could not be closed out by the end of the year, except in cases of emergency. We feel that it would be arbitrary on our part to allow any amount for taxes during construction, since there is no evidence that the company ever paid such an item on work in process and in view of the policy of the taxing authorities.

Interest during Construction

[15] The company calculated interest at approximately 8 per cent on $6,289,170, which included, according to Mr. Connor's statement, the "$5,232,518 for direct structural costs, $144,245 for preliminary and organization expense, $290,371 for preliminary and engineering expense, $179,117 for administrative and legal expense, and $42,919 for taxes during construction." He estimated that money would have to be available three months in advance of its actual use. Mr. Nichols used as his basis for calculation the total value of the physical property minus the items of general property plus preliminary and organization expense, administrative and legal expense, and engineering and supervision during construction. He used 6 per cent for his rate and assumed that the money would be required one month in advance of construction of units, which would require on the average of fifteen months for completion. He calculated a period of one half of fifteen months plus one month for eight and one-half months, the period on which he computed interest.

The evidence discloses that the company was able and had borrowed money from the parent company, the Lone Star Gas Corporation, for 6 per cent. We assume that money could be secured by the company when and as needed, which, as Mr. Nichols calculated, would be for an eight and one-half months' period, which results in a rate of 4¼ per cent on the basis of the total value of the physical property less the items of general property plus preliminary and organization expense, administrative and legal expense, and engineering and supervision during construction. Under this method the amount we allow for interest during construction is $214,104.21, which is based on interest at 6 per cent per annum.

Cash Working Capital

[16, 17] Mr. Steinberger calculated cash working capital at $169,700. This item included such costs as forty-five days' operating expenses, exclusive of gas purchases and taxes, cashier's fund of $2,000, bank balance of $60,324, prepaid accounts of $11,710, and materials and stocks of $41,016. The forty-five days' operating expense included distribution, commercial, new business, and general expenses incurred in 1934 and totaling $365,245.85. The amount

required for forty-five days' operation was calculated as $45,656. Prepaid accounts included prepaid insurance, surety bond, ice coupons, employers' group insurance, and prepaid taxes.

Mr. Nichols' estimate for the same item was $88,331.82 and included forty-five days' operating expenses and tools and supplies in the amount of $40,463.74. The forty-five days' operating expenses included distribution system, commercial, new business, general, uncollectible gas accounts, automobile license fees, check tax, and a pro rata share of the company's franchise tax incurred during the twelve months' period ending August 31, 1936, and totaling $382,944.68. When placed on a forty-five days' basis, this expense amounts to $47,868.08. We believe it is more accurate to accept Mr. Nichols' figures for forty-five days' operating expenses in that they are based on more recent experiences of the company than are Mr. Steinberger's figures, which are based on 1934 operating expenses. The difference between the two estimates is $2,212.08 in favor of the company. We agree with the city's omission of the bank balance figure of $69,324 as a part of cash working capital. The evidence does not disclose the necessity of such a balance in order for the company to secure proper banking facilities. We find that $88,331.82 is fair and reasonable for the two items of forty-five days' operating expenses and materials and stocks.

Going Concern Value

[18] The company made an allowance of $761,000 as a separate item for going concern value for which the city made no separate allowance. We are disallowing any separate value for going concern for the reason that we believe our method of valuation has amply taken such value into consideration. In our determination of the fair value of the property, a recapitulation of which appears below, we have treated the different items of property as composing an active and successful plant doing business in Fort Worth with customers attached and, with our treatment of collateral construction costs (allowances of $36,000 for preliminary and organization, $97,193.93 for administrative and legal, $141,278.89 for engineering and supervision, and $214,104.21 for interest during construction), we feel we have properly and adequately given due weight and consideration to going concern value in accordance with the law as announced by numerous Supreme Court decisions. Cedar Rapids Gas Light Co. v. Cedar Rapids (1912) 223 U. S. 655, 56 L. ed. 594, 32 S. Ct. 389; Des Moines Gas Co. v. Des Moines, 238 U. S. 153, 59 L. ed. 1244, P.U.R.1915D, 577, 35 S. Ct. 811; Galveston Electric Co. v. Galveston, 258 U. S. 388, 66 L. ed. 678, P.U.R.1922D, 159, 42 S. Ct. 351; Los Angeles Gas & E. Corp. v. California R. Commission, 289 U. S. 287, 77 L. ed. 1180, P.U.R.1933C, 229, 53 S. Ct. 637; Dayton Power & Light Co. v. Ohio Pub. Utilities Commission (1934) 292 U. S. 290, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647; Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission (1934) 292 U. S. 398, 78 L. ed. 1327, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763; St. Joseph Stock Yards Co. v. United States (1936) 298 U. S. 38, 80 L.

ed. 1033, 14 P.U.R.(N.S.) 397, 56 S. Ct. 720.

Recapitulation of Final Reproduction Cost Allowance

Land	$51,373.46
Leaseholds	1,529.55
Rights of way	1,073.91
Office building	169,567.88
District regulator station structures	11,932.24
Other distribution system structures	75,144.97
District regulator station equipment	72,782.79
Distribution line equipment	3,072,145.15
Service line equipment	388,966.84
Paving cut and replaced	260,760.59
Industrial equipment	71,151.48
Special meter equipment	5,531.42
Meters	578,727.73
House regulators	2,585.19
General	96,423.27
Total physical property	$4,859,696.47
Preliminary and organization expense	36,000.00
Administrative and legal expense	97,193.93
Engineering and supervision	141,278.89
Interest during construction	214,104.21
Cash working capital	88,331.82
Total reproduction cost new	$5,438,605.32

Contributions for Extensions

[19, 20] The record discloses that in the present fair value of the property there is included $159,528.73 as contributions made by consumers to the company for extensions. There is no obligation on the company to refund any part of this amount and the company has absolute title to this property. In the Ridglea Addition where one of these extensions was made and paid for by the consumers there were eleven customers and the value of the property used to serve them is $44,994.28, or over $4,000 per meter as compared with an approximate average per meter cost for the whole system of $168.

We believe the method by which the company acquires its property is not determinative of whether it should be included in the rate base. We do believe, however, that the law is well settled that property not used and useful in serving the public is not to be included as part of the property on which the company is entitled to a return. The record does not disclose whether the per meter cost for all these extensions is as high as that for Ridglea. If this were the case, we should be justified in excluding these extensions on the ground above mentioned.

The record further discloses that part of these extensions serve customers outside the city limits. If the engineers for the city had furnished us with accurate information concerning this matter, we should exclude property outside the city limits. We see no logical reason for burdening consumers within the city, who can be served at a per meter cost of $168, with an imprudent extension outside the city at a $4,000 per meter cost. We believe Mr. Justice Harlan enunciated the law correctly in San Diego Land & Town Co. v. National City (1899) 174 U. S. 739, 758, 43 L. ed. 1154, 19 S. Ct. 804, when he said:

"One of the points in dispute involves the question whether the losses to the appellant arising from the distribution of water to consumers *outside of the city* are to be considered in fixing the rates for consumers within the city. In our judgment the circuit court properly held that the defendant city was not required to adjust rates for water furnished to it and to its inhabitants so as to compensate the plaintiff for any such losses. This is so clear that we deem it unnecessary to do more than to state the conclusion reached by us on this point."

The company, however, very strongly urged upon the Commission the propriety of including this property. In this contention the company is somewhat inconsistent in that it petitioned the city for a raise in rates on the grounds that the then existing rates were confiscatory where the per meter cost was $168. Here it demands that we further aggravate that alleged situation by adding meters costing over $4,000 each. In the final analysis when the company's policy regarding these extensions is carried to its logical conclusion, there would be no distance too great preventing the company's serving consumers outside the city limits, and further, there would be no limitation on the per meter cost of the customers served. In this absence of quid pro quo on the company's part, gratis property could be thrown into the rate base irrespective of its original cost to the donors and its perpetual cost to all consumers served. Neither law nor equity can sanction such a policy with its resulting burdens on the inhabitants of the city with no corresponding responsibility resting upon the company.

No evidence was introduced segregating income and expense incident to these extensions from income and expense resulting from operations within the city limits. Because of this fact and the further fact that the record does not disclose what part of the property is outside the city limits we are somewhat reluctant to eliminate the property from the rate base. In permitting these extensions to remain in the rate base we are being extremely liberal to the company and want this allowance to in nowise be interpreted as reflecting our policy in the matter.

[21] In our findings of present fair value we have considered all the elements of value attaching to this property. In some instances sufficient factual information based on the company's policy was available to us and in one or two instances we were able to resort to historical costs. In making these findings we entertain the feeling that the company did not completely exhaust all its possibilities in connection with evidence it may have been able to furnish us in connection with historical facts on reproduction. The reason we say this is because in some instances witnesses for the company produced evidence based on the company's records running back as far as 1909. The testimony of Mr. Connor is an illustration:

Q. What factual data have you studied in preparation of yourself to plot such a curve, or to make a determination of the mortalities of steel pipe which determination is reflected in the mortality curve shown as figure 1 in Exhibit 7?

A. I have made a study of the history of the steel pipe in the system of the Fort Worth Gas Company from the date that it was changed from an artificial gas system to a natural gas system, down through the first of January, 1936. I have studied the rate at which the pipe has been put into the ground, various sizes of pipe, the amount of pipe which has been definitely abandoned and completely taken out of service, beyond that which has been installed each year, as applied to the various sizes, and also the replacements and aban-

donments of that pipe from 1910 through the year 1928, . . .

Q. Have you also made a determination of the removals, replacements, and abandonments by years?

A. Yes, and I have also made a determination of the net installations by years of sizes of pipe of each size and kind of steel pipe for the purpose of determining how much pipe actually went out of service and was not replaced as the history of the property progressed from 1910 to date.

The record is also lucid on the availability of historical facts when we examine part of the testimony of Mr. Steinberger in connection with his direct examination on Exhibit 1 which he sponsored.

Q. Now the next class of property as shown on page 2 is paving cut and replaced. How did you make a determination of the quantity of paving which had been cut and replaced in the distribution system at Fort Worth?

A. The quantities of paving cut and replaced as shown on page 168 of volume 1, Exhibit 1, were determined from an analysis and summarization of *all vouchers covering the costs or covering the payment for paving replaced over new main extensions only. This analysis covers a period of 1909 down to January 1, 1935.*

I have personally made the analysis from 1909 down to January 1, 1928, and since that time it was prepared under my direct supervision. (Italics supplied.)

Q. (By the Director) . . . I understood you to say you took these quantities from the work reports or from the books, covering the extensions only. Is that from 1909 down to date?

A. That is correct. The quantities were taken from the vouchers covering payment to the paving contractor for pavement he replaced.

Q. How did you arrive at that part of the old cast-iron system which was laid *before 1909?*

A. From the company's maps. *Their records were very good.* (Italics supplied.)

This testimony of Messrs. Connor and Steinberger, two of the outstanding witnesses of the company, clearly indicates the availability of more information from the books and vouchers of the company than was produced in evidence. If there is a wealth of detailed information, as indicated by Mr. Connor on installation and abandonment of all sizes of steel pipe since 1910, and if there are vouchers covering paving cut and replaced since 1909, and if the company's "records were very good," as Mr. Steinberger stated, on the cast-iron pipe laid *prior to 1909,* we come to only one conclusion. This conclusion is that historical records and facts on probably all property values, expenses, and income of the company since 1909, possibly earlier, could have been introduced to enlighten us more in our difficult task and responsibility to the company and the city in determining the present fair value of the property. We deplore and condemn the company's policy in not presenting this information. That is not the only criticism we level at the company's policy. Not only has it failed to present this information, except as it may have furthered the

company's case, as illustrated by the testimony above discussed, but in some of Mr. Wright's exhibits and testimony we see an attempt to confuse rather than enlighten.

In an attempt to bolster Mr. Biddison's testimony, Mr. Wright was called upon to sponsor Exhibits 38 and 50. His direct and redirect examination covers 360 pages and his cross- and recross-examination covers 112 pages. We have studied these exhibits and this testimony assiduously in an effort to separate the wheat from the chaff, and while we believe this part of the record has some weight we cannot, for the following reasons, give much probative value to it. Mr. Wright has been engaged in different phases of natural gas distribution since 1911. He was general superintendent of the Fort Worth Gas Company from 1927 to 1929, was made general manager in 1929, later was made vice president and general manager of the Fort Worth Gas Co., and in 1931 was made division manager. During the last fifteen years he has supervised over 500 miles of street mains and was responsible for 50,000 services in the cities of Fort Worth and Dallas. From 1928 to 1930 he stated that he supervised the installation of approximately $2,235,000 worth of property in the city of Fort Worth.

On direct examination this witness, in answer to the question as to whether he thought the construction program carried out in the city over the past eight years enabled the company to realize the same economies as might be realized in wholesale construction, said, "Yes, I think it would very closely approximate the cost of any wholesale reproduction of the property." In spite of this testimony, the witness, page 3 of Exhibit 38, deducted 20 per cent of direct labor or 5.83 per cent of total costs from the total inventory valued on the basis of actual costs for the past eight years in order to reduce the property to a wholesale basis. On page 8 of the same exhibit he deducted 10 per cent from cost of services 2 inches and smaller to compensate for wholesale construction. These calculations were made in comparing Messrs. Nichols' and Biddison's reproduction figures with the present inventory valued on the basis of the "actual costs" experienced by the company during the past eight years. We are unable to understand why one with the experience and qualifications of Mr. Wright who believes the program he supervised to be equivalent to wholesale construction should in the next breath make deductions from his costs in order to reduce such costs to a wholesale basis.

This witness was asked to recite the actual experience of the company in the matter of stores expense. In answer he said:

"The percentage of stores, or rather, the expense of stores, expressed as a percentage of the materials handled through the Fort Worth warehouse is available for a number of years back, but *not for all of the period of the heaviest construction.* I have, however, a compilation of the stores expense incurred in the Dallas system for a period of five or six years which I think is quite comparable to what the actual costs have been in Fort Worth." (Italics supplied.)

The record does not reflect what

kind of program or the size of the program referred to in Dallas. If the company produced records going back to 1909 to bolster its contentions, why did this witness state that there were no records on stores expense during the heaviest construction period of three or four years back? This period, in which it was said no records were available, is of particular importance in furnishing facts instead of a questionable substitute. Why were the records not available and why did the company prefer to substitute stores expense coming from the Dallas system? Again there is only one conclusion to be drawn and that is that the company preferred to submit to us this substitute in preference to its book records showing actual experience.

The same objection applies equally to the tools expense. Mr. Wright gave figures covering this expense from 1925 to 1930 from Dallas. The same period could have been shown from Fort Worth where Mr. Wright had direct supervision of the work. He stated also that his trench depths were a little deeper than those used by Mr. Biddison and that not more than 15 per cent of ditching could be done by machine. Again he recited conditions governing the costs in Dallas instead of Fort Worth and at the same time stated that he supervised construction of one-third of the mains in the city of Fort Worth and that trench depths were determined by him. The utter fallacy of this testimony is more fully realized when Mr. Wright's estimated machine excavation of 15 per cent is compared with Mr. Biddison's estimate of 26.4 per cent machine excavation on the total yardage basis and 31.09 per cent on the basis of total feet of mains.

After carefully going through all the exhibits in connection with reproduction cost new of the property and those in connection with the different accounting and auditing problems submitted by the city and the company, most of which exhibits were almost self-explanatory and show preparation with a view of disclosing information, we find ourselves confronted with Mr. Wright's exhibits. Most of these impress us as being a maze of figures changed and altered by deductions having no basis or foundation in experience or facts and far removed from realities which we feel Mr. Wright must have been closer to and possessed a more intimate knowledge of such realities than any other official of the Lone Star Gas Company. Frankly, we are unable, even after careful study of the testimony in connection with Exhibits 38 and 50, to label or determine what method this witness attempted to follow. He did not resort to reproduction cost new, historical cost, book cost, or the "split" inventory method. He seems to have a combination of all these methods with the result that his method, in the language of John Haywood, is "Neither fish, nor flesh, nor good red herring."

The situation is similar to that mentioned in Winona v. Wisconsin-Minnesota Light & P. Co. (1921) 276 Fed. 996, P.U.R.1922C, 461, 469, where the court said: "Evidence as to the financial history of the prior companies, and of the present defendant company so far as it relates to the Winona properties, is extremely meager, so much so that it raises a

suspicion of studied omission." We call attention again to quotations from the Supreme Court in the Lindheimer and Knoxville Water Co. Cases, discussed *supra* under Engineering and Supervision, to the effect that the company had ample opportunity to establish its contentions which it sought to do by "elaborate estimates and computations" which "overshot the mark." In so doing, they proved too much, hence failing of the intended result. The company regulated owes the duty and has the responsibility of freely furnishing information "upon which a just regulation can be based."

III. Operating Expenses

For the years 1933, 1934, and 1935 the company followed the policy of setting up on the books a charge to expenses and a corresponding credit to income for rent of the company's office building in the amounts of $27,000, $33,400.08, and $33,400.04. Since these are only book entries and represent no expense or income, we are eliminating them from expenses of operation. With these eliminations the company's books reflect total operating expenses of (1931) $620,278.10, (1932) $469,311.80, (1933) $459,441.18, (1934) $481,023.16, (1935) $508,603.43, or an average annual operating expense for the 5-year period of $507,731.53, exclusive of gas purchases. There is no disagreement between the company and the city on these figures. There is not, however, unanimity as to the propriety of a number of items appearing as expenses incurred by the company in rendering service as a public utility. Most of our discussion and findings set out below concern the wisdom of these questionable items.

Distribution System Expense

[22] The distribution system expenses for the 5-year period were: (1931) $188,652.14, (1932) $141,144.54, (1933) $127,728.93, (1934) $142,828.19, (1935) $184,627.29, or an annual average expense of $156,996.22. In 1931 there is included $4,815.34 as the cost of "special home service survey in various parts of city." This expense included such items as payroll, car fare, auto expense, business cards, dinners at Texas hotel, filing cards and service slips, customers' information folders, folders—"Facts about the Gas Business," photostats of pipe-line system, multigraphed letters, and gas bill statements. (Exhibit 17, pp. 16 and 17.) We are eliminating these items because we believe they are not essentially expenses incurred in public service operations but are rather in the nature of merchandising and appliance expenses. We also believe these expenses are nonrecurring. With these eliminations, we find distribution system expenses for the period to be (1931) $183,836.80, (1932) $141,144.54, (1933) $127,728.93, (1934) $142,828.19, and (1935) $184,627.29, or an average annual expense of $156,033.15, which is our allowance for this expense.

Commercial Expense

[23–25] Commercial expenses, according to the records of the company, amounted to (1931) $67,237.65, (1932) $66,813.19, (1933) $66,863.32, (1934) $67,392.87, (1935) $65,551.61, or an average an-

nual expense of $66,771.73. Included in this expense account are such charges as payments to Retail Credit Men's Association and other similar agencies, cost of credit men's luncheons, conventions, and travel, and a pro rata part of the salary of Mr. E. C. Whitcomb based on the amount of time he spent with and devoted to merchandise and appliance operations. We are excluding these expenses for the reason that they were not incurred in public service operations. The amounts so excluded are (1931) $276.22, (1932) $894.69, (1933) $857.97, (1934) $894.59, and (1935) $892.38. With these eliminations, commercial expense for the period amounts to (1931) $66,961.43, (1932) $65,918.50, (1933) $66,005.35, (1934) $68,498.28, and (1935) $64,659.23, or an annual average amount of $66,008.56.

New Business Expense

[26] New business expense for the period amounted to (1931) $23,805.73, (1932) $24,933.72, (1933) $27,039.53, (1934) $32,014.76, and (1935) $29,414.32, or an annual average charge of $27,441.61. A detailed analysis of the charges to new business expense reflects that the amounts of (1931) $9,949.44, (1932) $13,415.67, (1933) $20,320.44, (1934) $23,580.08, and (1935) $20,363.24 were incurred for such items as compensation paid to appliance salesmen and for demonstration labor, installation of piping and appliances for cooking school, rearranging and redecorating appliance booth at Fat Stock Show, expenses of conducting cooking schools, newspaper, magazine and miscellaneous advertising which should be allocated to merchandising operations, and that part of new business supplies and expenses such as expense of cooking school conducted in the company's building and rent and expense of booth at Fat Stock Show allocated to merchandising. (Exhibit 17, pp. 20–28.) Under the accounts of newspaper and magazine and miscellaneous advertising there were included large sums properly belonging to sale of appliances. Mr. Phillips based his allocations on a careful examination and analysis of all advertising done by the company for the period. He stated that the cost of every inch of advertising pertaining to public service operations had been included and the remainder excluded. In making these eliminations we are following a well-established policy of excluding from expenses all costs not incurred in public service operations.

When the eliminations above discussed are made, new business expense amounts to (1931) $13,856.29, (1932) $11,518.05, (1933) $6,719.09, (1934) $8,434.68, and (1935) $9,051.08, or an annual average amount of $9,915.84.

General Administrative Expense

[27] General administrative expense amounted to (1931) $186,409, (1932) $89,368.67, (1933) $84,822.85, (1934) $89,609, and (1935) $83,189.67, or an average annual expense of $106,680.03. As the title of this expense account indicates, it is sufficiently broad to cover a large number of items, some of which are of a miscellaneous nature. An analysis of this expense covers eighteen pages and there are present certain ex-

penses and charges that do not come under the classification of public service expenses. (Exhibit 17, pp. 29–46.)

One of the items found is management fees for the years 1931 to 1934, inclusive, in the amounts of $17,277.74, $16,632.01, $15,915.05, and $16,133.46. (Exhibit 17, p. 30.) These fees were paid to the Lone Star Gas Corporation but their payment ceased in 1934, which indicates that the company had determined that such charges were not legitimate expenses. These charges were not shown to have been made for any services actually rendered by the parent Lone Star Gas Corporation, but the amounts were determined by an arbitrary charge of 50 cents per average number of customer connections per annum. In the absence of a clear showing of value received in services for this fee and also because the company has ceased paying it and it is a nonrecurring item, we are disallowing it as an operating expense. With reference to managerial services furnished by an affiliated company where the Commission determined the company did not receive full value, Mr. Justice Cardozo, in the Dayton Power & Light Co. Case, *supra,* at p. 291 of 3 P.U.R.(N.S.) said:

"In view of the close relation between the affiliated companies, the burden was upon appellant to sustain the fairness of the contract."

See also Texas Cities Gas Co. v. Waco, Gas Utilities Docket No. 101, June 18, 1935. We are fully convinced that any managerial problems arising would be speedily, adequately, and eagerly taken care of by the parent Lone Star Gas Corporation which owns almost 100 per cent of the common stock of the company. In the absence of convincing evidence that the parent company rendered services in good faith and the subsidiary received full value therefor, we feel that we, by allowing management fees under such circumstances, should be only aiding and abetting the parent company in receiving what, for practical purposes, is nothing more than extremely poorly disguised dividends which, under such a method, could and would be charged to the ratepayer in the form of expenses.

[28–31] An analysis of general office traveling and incidental expense shows that (1931) $678.75, (1932) $376.25, (1933) $657.12, (1934) $981.58, and (1935) $1,305.46 was spent for such items as club dues, tickets and entertainments, convention expense, and conventions and trips. It is not for us to determine the company's policy on the matter of paying dues, subscriptions and membership fees in golf and country clubs, civic and other worthy and worth-while clubs and organizations. If the company sees fit to pay these sums for certain of its employees for the purpose of improving its public relations, we take it that the company feels well paid in so doing. It is, however, of some concern to us when the company, instead of paying these expenses out of profits or surplus, endeavors to burden the ratepayer by attempting to classify such payments as legitimate operating expenses in rendering service to the public. The elimination of these items is in strict accordance with our policy as set out in Municipal Gas Co. v. Wichita Falls

(Tex. 1935) 9 P.U.R.(N.S.) 33; Re M & M Pipe Line Co. (Tex. 1935) 11 P.U.R.(N.S.) 234; and Texas Cities Gas Co. v. Waco, *supra*.

Included under the heading of charitable donations, we find the amounts of (1931) $4,260.70, (1932) $3,107.50, (1933) $3,375.57, (1934) $3,995.44, and (1935) $3,083.23. An analysis of these donations discloses, among gifts to charity, payments for such items as Armour and Company —employees' golf tournament and prize steer fed by Texas, better baby exhibit, Blackstone hotel—Benefit Tickets, Baer-Dempsey bout, Belknap street overpass celebration, culinary workers, dinner for county judges and commissioners, Fort Worth Ladies' Band, Fort Worth Chamber of Commerce, Fort Worth Trades Assembly, Fort Worth Baseball Club, Fort Worth N. R. A. Committee, Fort Worth Advertising Club, Fort Worth Restaurants Association, Harmony Club, hotel greeters, Meadow Brook Country Club, President's ball, quilt show, Rotary Club, Retail Merchants Association, Retail Credit Men's luncheon, Southwestern Exposition and Fat Stock Show, T. C. U. Football Championship fund, Texas hotel—opening of new hangar, and U. S. Narcotic farm site. It requires some stretch of the imagination to see how all these items can be classified as charitable donations. If one should assume, which we do not, that the citizens of Fort Worth who purchase gas from the company were willing to constitute the company their agent in making charitable donations, we rather doubt that any of them would entirely agree with the company's judgment in selecting objects of charity. The consumers probably would require more discrimination than the record indicates the company has exercised. Be that as it may, we do not question the company's policy in making donations to charity and contributing otherwise to worthy causes in the city.

We are in hearty accord with the desire of every one who is financially able to make contributions to charity. We are also in hearty agreement with the company when it insists that it has a public duty to make such contributions, but under the method it asks us to sanction and approve it would not be making the donations. It desires to force the gas consumer to reimburse it for such contributions in insisting that such are proper public service expenses. If the company is sincere in its desire to make these contributions, it knows that our disallowance of them as a proper expense does not prohibit it in any manner from realizing its desire. We will not, however, approve of any such plan requested by the company whereby it sets itself up as the self-appointed dispensing agent for the consumer in the matter of charitable donations and reaps whatever benefits it may thereby acquire by such a policy. The benefits which inure to the stockholders of a public utility in dues, membership fees, and charitable donations by far outweigh those which may inure to the consumers. If the company elects to expend money for nonpublic utility purposes, such expenditures can be paid either out of profits or surplus or by the parent Lone Star Gas Corporation stockholder. We have, on numerous occasions, held that such payments by the company

are not proper charges to operations of a gas utility. Municipal Gas Co. v. Wichita Falls, *supra;* Re M & M Pipe Line Co. *supra;* Re Community Nat. Gas Co. (Tex. 1936) 15 P.U.R. (N.S.) 149; Texas Cities Gas Co. v. Waco, *supra.*

[32] An analysis of miscellaneous general administrative expense shows amounts of (1931) $5,236.83, (1932) $5,423.68, (1933) $4,180.86, (1934) $6,269.81, and (1935) $6,357.23. Among items represented in these sums are such items as candy, flowers, convention expense, American Academy of Political and Social Science, Advertising Club of Fort Worth, Business of Professional Club, Dallas Sales Managers' Club, Fort Worth Club, Fort Worth Employers Association, Fort Worth Round Table Club, Glen Garden Country Club, Meadow Brook Country Club, River Crest Country Club, Southwest Motors Club, Texas Jockey Club, University Club, Visitors Jubilee, Chamber of Commerce, and tickets—baseball, Fat Stock Show, benefits, etc. For reasons given above in connection with our disallowance of other nonpublic utility operations, we are not including these items as a proper charge to the consumer. We believe the court in Reno Power, Light & Water Co. v. Nevada Pub. Service Commission, 298 Fed. 790, P.U.R.1923E, 485, 501, properly stated the law when it said:

"I note charges in the first eight months of 1921 for picnics, photographs of employees, rodeo stock, charitable organizations, magazines and newspapers, floral pieces and music. Such expenditures, especially charitable contributions, are certainly to be commended, *but in a suit of this character they should not be imposed on the ratepayers,* . . ." (Italics supplied.)

[33] There is also included as a charge to general administrative expense law expense in excess of the normal retainer's fee for the year 1931, in the amount of $7,500 and for the year 1933, in the amount of $2,500. The record does not disclose the reason for, nor the nature of, these additional legal fees, and we are therefore not making any allowance for these two items. Regulatory Commission expense was charged in the amounts of (1931) $84,746.44, (1932) $5,635.10, (1933) $339.81, (1934) $5,875.22, and (1935) $11,239.92. The record discloses that $12,525 of the 1931 expense of $84,746.44 was incurred during 1929 and 1930 and hence should be thrown back to those years and not included in the 1931 account. Mr. Hulcy stated that the report made by Sanderson and Porter of New York city in 1931, the expense of which accounts for more than 50 per cent of the total for the year, was never used or presented to any regulatory body. The record also reflects that there was no rate controversy in the years 1932, 1933, or 1934. With the $12,525 adjusted back to prior years the balance for 1931 is $72,221.44 of which we are allowing $10,226.98. For the remaining years we are allowing as fair and reasonable (1932) $610.35, (1933) $277.25, (1934) $4,878.14, and (1935) $11,239.92, or a total of $27,232.64. In our allowance of these amounts we are requiring the company to amortize them over a period of ten years. Texas Cities Gas Co. v.

Waco, *supra;* and Texas Border Gas Co. v. Laredo (Tex. 1933) 2 P.U.R. (N.S.) 503.

After the above-discussed eliminations are deducted, we find the general administrative expenses to be (1931) $66,710.54, (1932) $58,-194.13, (1933) $57,854.44, (1934) $56,354.44, and (1935) $61,203.83, or an average annual expense of $60,-063.48, plus $2,723.26 for the amortized part of regulatory Commission expense for a total allowance of $62,-786.74.

Taxes Other Than Federal Income Tax

Taxes, exclusive of the Federal Income Tax, amounted to (1931) $148,-385.92, (1932) $137,355.95, (1933) $143,069.36, (1934) $146,718.14, (1935) $143,393.79, or an average annual cost of $143,780.63, which amount we allow.

Uncollectible Accounts

[34] The company charged to operating expenses losses from uncollectible accounts in the amounts of (1931) $5,787.66, (1932) $9,715.73, (1933) $9,917.19, (1934) $2,459.23, and (1935) $2,426.74. Mr. Phillips eliminated these items on the ground that the company required deposits as a matter of policy from most customers and had the right to require sufficient deposits for its protection from all its consumers. Since the company has the means of protecting itself against losses of customers' accounts, we cannot see the fairness or the necessity of requiring the ratepayer to bear the burden of losses, the occurrence of which the company is able to prevent. We quote with approval in this connection a statement of the court in Reno Power, Light & Water Co. v. Nevada Pub. Service Commission, *supra,* at p. 500 of P.U.R.1923E, when it said:

"Bad debts cannot be considered in determining whether rates are confiscatory, except upon satisfactory evidence that the company was in nowise at fault."

Re Community Nat. Gas Co. *supra,* and Texas Cities Gas Co. v. Waco, *supra.*

Recapitulation of Allowable Operating Expenses

Distribution system expenses	$156,033.15
Commercial expenses	66,008.56
New business expenses	9,915.84
General administrative expenses ..	62,786.74
Taxes other than Federal Income	143,780.63
Total	$438,524.92

Gas Purchases

Domestic and industrial gas purchases amounted to (1931) 2,808,691 thousand cubic feet, (1932) 2,669,-608 thousand cubic feet, (1933) 2,-236,058 thousand cubic feet, (1934) 2,306,029 thousand cubic feet, (1935) 2,411,837 thousand cubic feet, or an annual average of 2,486,245 thousand cubic feet. By applying the 32-cent gate rate, hereinafter discussed, we arrive at an average annual cost of $795,598.40 for domestic and commercial gas purchases.

Lost and Unaccounted for Gas

Lost and unaccounted for gas amounted to (1931) 183,141 thousand cubic feet, (1932) 151,491 thousand cubic feet, (1933) 184,048 thousand cubic feet, (1934) 368,679 thousand cubic feet, (1935) 328,619 thousand cubic feet, or an annual average of 243,196 thousand cubic feet.

There is nothing in the record disclosing why lost and unaccounted for gas increased more than 100 per cent in 1934 over 1933 and was little lower for 1935. We are, however, allowing as an expense the cost of the annual average amount of 243,196 thousand cubic feet at 32 cents, which gives a figure of $77,822.72, which is a greater net amount than the company receives for all the industrial gas sold in the city of Fort Worth.

Temperature Correction

The city introduced in evidence Exhibit No. 16 which shows the average number of degree days deficiency for the period 1909 to 1935, inclusive. This exhibit shows that the years 1931 to 1935, inclusive, were warmer years than the average of the period from 1909 to 1935, inclusive, the degree day deficiency variation below the average being (1931) 302, (1932) —14, (1933) 614, (1934) 324, and (1935) 55. The evidence shows that for every degree day of deficiency each customer, on the average, will consume not less than 18 cubic feet of gas. The record also discloses that the annual consumers numbered (1931) 34,377, (1932) 32,985, (1933) 31,722, (1934) 32,490, (1935) 32,390, or an average annual number of consumers for the 5-year period of 32,793. Had the temperature been normal over the 5-year period, the consumers would have used an additional 150,140 thousand cubic feet of domestic and commercial gas over what they actually used. With reference to this problem, Mr. Chief Justice Hughes in Los Angeles Gas & E. Corp. v. California R. Commission, 289 U. S. 287, 320, 77 L. ed. 1180, P.U.R.1933C, 229, 250, 53 S. Ct. 637, said:

"The question, then, is as to the estimates of revenue and expenses. The company complains that the Commission's estimate of revenue was too high. The problem largely concerns temperatures, and it is plain that the Commission was justified, in fixing rates which were to apply for a considerable period, in taking average temperatures. The district court, with its special knowledge of local conditions, and speaking in April, 1932, held that the action of the Commission was fair. The circuit judge supplemented this finding of the majority by his holding that there was 'nothing unreasonable in the estimate of returns by the Commission so far as temperature is concerned' and that there was 'nothing to indicate that due consideration was not given to the possible effect of the depression upon the consumption of gas.'"

See also Reno Power, Light & Water Co. v. Nevada Pub. Service Commission, *supra;* Community Nat. Gas Co. v. Denton (1937) Gas Utilities Docket No. 96; Re Community Nat. Gas Co. *supra;* Texas Cities Gas Co. v. Waco, *supra,* and Municipal Gas Co. v. Wichita Falls, *supra.*

By applying the gate rate cost of 32 cents per thousand cubic feet, we arrive at an additional operating expense for gas purchase of $48,044.80.

By adding together the domestic and commercial gas purchase expense of $795,598.40 and the lost and unaccounted for gas purchase expense of $77,822.72 and the additional gas to be purchased for temperature correction of $48,044.80, we arrive at a to-

tal operating expense for gas purchase, exclusive of industrial gas, of $921,465.92.

Gate Rate

[35] The company has set up on its books a charge of 40 cents per one thousand cubic feet of gas to be sold to domestic and commercial consumers in the city and as a basis of determining the expense resulting from lost and unaccounted for gas. In Re Lone Star Gas Co. Gas Utilities Docket No. 75, September 13, 1933, Exhibit No. 22, we determined that a fair and reasonable rate to be charged by the company for all its city gate sales should not exceed 32 cents per one thousand cubic feet. In that hearing, we made a thorough, detailed, and exhaustive study in our determination of the fair value of the company's property upon which value we based our finding as to a proper and adequate rate. We are not here dealing with a situation present in Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission, *supra,* at p. 163 of 4 P.U.R.(N.S.) where the court said the affiliated sellers "must serve their affiliated buyers at reasonable rates," in that, strictly speaking, the Lone Star Gas Company, primarily a pipeline and transmission company, does not "sell" to itself as a distributing company at the city gate of Fort Worth. The principle of this case, however, is applicable. Since we have determined that a reasonable gate rate is 32 cents, it is our duty to see to it that the gas consumers of the city are protected from the company's attempt to saddle upon them a higher rate. Our Order No. 75, *supra,* is still in full force and effect. We are unable to distinguish between the fairness of rates to be charged by the company when it sells at the city gates to towns and cities served by its corporate affiliates, the Community Natural Gas Company and the Texas Cities Gas Company, and a city gate rate to be charged on the books of the division of the company serving the city of Fort Worth. For the foregoing reasons, we are not allowing as an expense a city gate rate of more than 32 cents to be set up on the books of the distributing division of the company and charged to the ratepayers of the city.

Depreciation

[36] The company, December 31, 1935, had accumulated in its depreciation reserve the sum of $2,066,561.55. Based on our findings of $5,436,605.32 as the undepreciated value of the company's property used and useful in serving the public in the city, this depreciation reserve amounts to approximately 38 per cent of the rate base. The company insists that the property is in 91.4 per cent condition. In other words, the company states that the property is depreciated to the extent of only 8.6 per cent, though it has accumulated in its depreciation reserve an amount indicating a policy of forcing the ratepayer to assume the burden of an excessive expense charge for depreciation, the cumulative credits of which show the property to be depreciated 38 per cent. We cannot approve of the company's policy of blowing hot by its insistence on having a practically undepreciated rate base and blowing cold at the same time

in wanting to charge a rate high enough to absorb this enormous annual depreciation expense.

[37] One of the best tests known in determining the accurateness of a proper annual depreciation charge is the amount the company actually charges to the depreciation reserve each year for replacements necessary because of property retirements resulting from a depreciated condition. The company, over the past five years, charged to the depreciation reserve (1931) $89,868.58, (1932) $41,989.41, (1933) $48,790.61, (1934) $45,447.21, and (1935), $42,419.78, or an average annual amount of $53,703.12. We have carefully considered all the different phases of the annual amount which we think will properly protect the company's property and at the same time not burden the ratepayers unduly when we fix $108,000 per annum as the proper amount for the company to set up on its books as an expense and to be accumulated in its depreciation reserve. This amount is over $54,000 more than the annual average amount over the past five years as experienced by the company. Should this amount be determined to be inadequate during the next few years, which we do not anticipate, the company may appeal to us and upon proof as to inadequacy of this allowance, we will, in a proper proceeding, revise and increase the amount.

Credits to Operating Expenses

We find from the record that the average annual difference between sales and purchases of industrial gas for the years 1931 to 1935, inclusive, is $76,755.80, and this amount is credited to the operating expense chargeable to domestic and commercial consumers.

Under the heading of Penalties and Allowances, we find an average annual credit of $27,344.75 earned, which amount is credited against operating expenses.

A third credit against operating expenses is found in the account of Miscellaneous Revenues in the average annual amount of $1,682.24, bringing the total average annual credits to operating expenses to $105,782.79 per annum.

Summary—Operating Expense

By adding together the total operating expenses of $438,524.92, the gas purchases expense of $921,465.92, depreciation $108,000, we have a total operating expense and depreciation of $1,467,990.84. And by deducting the $105,782.79 credits, we arrive at a total necessary income, exclusive of return on investment, of $1,362,208.05.

IV. Rate of Return

[38] We are fixing 6 per cent as a proper return on the fair value of the company's property used and useful in discharging its public service obligations in the city of Fort Worth. Mr. Connor testified that the company was able to borrow money in substantial sums from the Lone Star Gas Corporation at 6 per cent. The company had 5 per cent bonds or debentures outstanding that Mr. Connor said were selling at 104 which gives a yield or rate of return of approximately 4.8 per cent. We believe that the city of Fort Worth, which is growing and

prosperous, has a citizenry keenly aware of the conveniences resulting from the use of natural gas, as evidenced by an investment in gas appliances equivalent in amount to the investment of the company in the city. In view of these facts, we believe the company occupies a strategic position in the matter of conducting a stable public utility business from which it will continue to earn profits under the rate we have set and which we believe to be fair and reasonable.

V. Rate Schedule

We find that the following schedule of rates is just and reasonable, and that its application will produce a net return of 6 per cent per annum on the fair value of the properties used and useful in distributing gas to consumers in Fort Worth, Texas, after providing for adequate operating expenses and depreciation reserve:

For the first 1,000 cubic feet of monthly consumption registered on one meter, 75¢;
For the next 19,000 cubic feet of monthly consumption registered on one meter, 61¢ per each 1,000 cubic feet;
For the next 10,000 cubic feet of monthly consumption registered on one meter, 57¢ per each 1,000 cubic feet;
For the next 20,000 cubic feet of monthly consumption registered on one meter, 52¢ per each 1,000 cubic feet; and
For all gas in excess of 50,000 cubic feet of monthly consumption registered on one meter, 42¢ per each 1,000 cubic feet.

[39] The billing date shall be the date the bill is delivered to the residence or place of business of the consumer and in the event the bill is not paid within ten days an additional charge of 11⅑ per cent may be added to such bill for failure to make prompt payment of such bill.

[40] A minimum charge of 50 cents net per meter per month will be made, even though the consumer shall not have used sufficient gas in such month to make the amount of the bill equal to such charge of 50 cents.

MASSACHUSETTS SUPREME JUDICIAL COURT

B. & B. Amusement Enterprises, Incorporated

v.

City of Boston

(— Mass. —, 8 N. E. (2d) 788.)

Payment, § 36 — Service denial to enforce — Arrearages of tenant.

1. A city operating a water utility has no right to require a property owner, as a condition precedent to receiving water, to pay bills charged to a tenant for water previously furnished to the tenant, p. 128.

Reparation, § 38 — Voluntary payment as defense — Protested payment.

2. A property owner which has paid bills of a tenant under protest in order to secure water service from a municipal waterworks may recover the

amount exacted as a condition of furnishing of service, since such payment is not voluntary, and the customer is not required first to resort to litigation in order to avoid the imputation of having paid voluntarily; it is enough that the customer had an immediate right to the water and would have been deprived of that right if it had not submitted to the unlawful exaction, p. 128.

[May 26, 1937.]

ACTION *to recover back money paid under protest in order to obtain water service, denied by a municipal waterworks on account of arrearages of a tenant; decision against municipality affirmed.*

APPEARANCES: E. M. Dangel and S. Andelman, both of Boston, for plaintiff; I. H. Fox, Assistant Corporation Counsel, of Boston, for defendant.

QUA, J.: The plaintiff seeks to recover back a sum of money heretofore paid by it to the defendant for water which the defendant, in the years 1930 and 1931, furnished and charged to a lessee of the plaintiff then occupying the plaintiff's premises. The lease required the lessee to pay for water. Later the premises became vacant. In 1935, the plaintiff itself requested the defendant to supply water to be consumed thereon. The defendant refused to do so unless the plaintiff should pay for the water formerly charged to the lessee. At that time any lien which the defendant may have had upon the land under G. L. (Ter.Ed.) Chap. 40, §§ 42A-42C, had been lost. The plaintiff, "wishing to have the water turned on and supplied to the said premises," paid the sum in question under protest, contending that it was not legally bound to pay the same.

[1] Plainly the city had no right to require the plaintiff, as a condition precedent to receiving water, to pay bills charged to the tenant for water previously furnished to the tenant. Turner v. Revere Water Co. (1898) 171 Mass. 329, 50 N. E. 634, 40 L.R.A. 657, 68 Am. St. Rep. 432; Cox v. Malden & Melrose Gas Light Co. (1908) 199 Mass. 324, 85 N. E. 180, 17 L.R.A.(N.S.) 1235, 127 Am. St. Rep. 503; Brand v. Water Comrs. of Billerica (1922) 242 Mass. 223, 228, 136 N. E. 389. See G. L. (Ter. Ed.) Chap. 270, § 13. That the city did impose this condition appears by fair construction of the case stated without resorting to inference. See, however, G. L. (Ter.Ed.) Chap. 231, § 126.

[2] The defendant contends that the plaintiff cannot recover because it made the payment voluntarily. But the plaintiff as a landowner had a right to a supply of water, which it was the duty of the city as the operator of a public utility (Loring v. Commissioner of Public Works [1928] 264 Mass. 460, 464, 163 N. E. 82) to furnish on the same terms on which it furnished water to others. No other comparable service was available to the plaintiff. The condition which the city sought to impose was unlawful and oppressive. Yet as a practical matter the plaintiff was obliged to

submit to it for the time being or go without water. We think the plaintiff was justified in taking the course which it did take as the simplest way out of the difficulty, and that it was not bound first to resort to litigation in order to avoid the imputation of having paid voluntarily. Nor do we think that in a case of this kind the plaintiff need show the purposes for which it wanted the water or the importance or necessity of having it. It is enough that the plaintiff had an immediate right to the water and would have been deprived of that right if it had not submitted to the unlawful exaction. Boston v. Edison Electric Illum. Co. (1922) 242 Mass. 305, 310, 136 N. E. 113; Cunningham v. Munroe (1860) 15 Gray (81 Mass.) 471; Parker v. Great Western R. Co. (1844) 7 Mann. & G. (Eng.) 253, 292; Clough & Co. v. Boston & M. R. Co. (1914) 77 N. H. 222, 90 Atl. 863, Ann. Cas. 1915B, 1195; Warren (S. D.) Co. v. Maine C. R. Co. (1926) 126 Me. 23, 28, 135 Atl. 526; Trower v. San Francisco (1907) 152 Cal. 479, 92 Pac. 1025, 15 L.R.A. (N. S.) 183; Chicago v. Northwestern Mut. Life Ins. Co. (1905) 218 Ill. 40, 75 N. E. 803, 1 L.R.A.(N.S.) 770; Holly v. Neodesha (1912) 88 Kan. 102, 112, 127 Pac. 616; Panton v. Duluth Gas & Water Co. (1892) 50 Minn. 175, 52 N. W. 527, 36 Am. St. Rep. 635; Westlake & Button v. St. Louis (1882) 77 Mo. 47, 46 Am. Rep. 4; Swift & C. & B. Co. v. United States (1884) 111 U. S. 22, 28, 28 L. ed. 341, 4 S. Ct. 244.

None of the cases cited by the defendant where payment has been held voluntary involved the necessity of submission to an unlawful demand as a condition upon the exercise of a legal right.

Order dismissing report affirmed.

UNITED STATES CIRCUIT COURT OF APPEALS, TENTH CIRCUIT

State of Oklahoma ex rel. H. J. Williams

v.

Oklahoma Natural Gas Corporation et al.

[No. 1245.]

(89 F. (2d) 416.)

Statutes, § 19 — Strict construction — Penal provisions.

1. Statutory provisions for recovery of penalties on account of a fraudulent or void claim against school district officers are penal in nature and must be strictly construed, p. 133.

Fines and penalties, § 5 — Improper charges for gas — Payment by school officers — Bad faith or misfeasance.

2. A petition for recovery of penalties, under a statute providing for re-

covery of penalties where school district officers pay out money in pursuance of an unauthorized, unlawful, fraudulent, or void contract does not plead facts to bring the case within the statute, where it is alleged that school officers have paid for gas under rates fixed by Commission order instead of rates prescribed by a franchise, when neither the rate order nor the franchise provision was unauthorized, unlawful, or fraudulent and no bad faith or misfeasance is alleged on the part of the officers of the school district but it is alleged that such officers at the times of payment had no knowledge of such franchise, p. 133.

Rates, § 226 — Franchises — Expiration.

3. A franchise provision establishing the rate to be charged for gas furnished to a school district ceases to be operative at the expiration of the franchise, p. 134.

Rates, § 230 — Franchises — Effect of Commission rate order.

4. A franchise rate for gas furnished to a school district is no longer effective after the Corporation Commission establishes a gas rate by general order, p. 134.

Rates, § 32 — Powers of Commission — Contract rates — Exemption.

5. The Corporation Commission, after exercising its jurisdiction to make a general rate order, may not exempt therefrom and leave in force a contract rate, p. 134.

Reparation, § 11 — Exclusive powers of Commission — Overcharges.

6. The Corporation Commission has exclusive jurisdiction to determine the amount, if any, which a gas corporation has charged a school district for gas furnished in excess of the lawful rate or in excess of what the Corporation Commission should declare to be the legal rate, p. 134.

[March 24, 1937. Rehearing denied May 1, 1937.]

APPEAL *from judgment dismissing complaint for penalties on account of alleged overpayments by a school district for gas; affirmed.*

APPEARANCES: A. B. Honnold, of Tulsa, Okla. (Paul Avis, of Tulsa, Okla., on the brief), for appellant; I. J. Underwood, of Tulsa, Okla. (O. L. Lupardus and Allen, Underwood & Canterbury, all of Tulsa, Okla., on the brief), for appellees.

Before Lewis, Phillips, and Bratton, Circuit Judges.

PHILLIPS, C. J.: The relator brought this action against the Oklahoma Natural Gas Corporation, a Maryland corporation, hereinafter called the Gas Corporation, city of Tulsa, a municipal corporation, and the board of education of the city of Tulsa, being Independent School District Number 22, a municipal corporation, hereinafter called the School District, in the district court of Tulsa county, Oklahoma. Summons was issued on August 11, 1932, and served on the Gas Corporation on August 13, 1932. An alias summons was issued on September 1, 1932, and served on the Gas Corporation on September 7, 1932. The action was brought un-

der the provisions of § 5965, Okla. Stats. 1931 (62 Okla. Stats. Ann. § 373).[1]

The cause was duly removed to the United States district court for the northern district of Oklahoma. See State ex rel. Williams v. Oklahoma Nat. Gas Corp. (1936) 83 F. (2d) 986.

A demurrer to the petition on the ground of misjoinder of causes of action was sustained. On December 4, 1933, the Oklahoma Natural Gas Company, a Delaware corporation, hereinafter called the Gas Company, was made a party defendant. On January 3, 1934, the relator filed a separate petition to recover, under the provisions of §§ 6831 and 6832, Okla. Stats. 1931 (70 Okla. Stats. Ann. §§ 132, 133), double the amount of the excess over the alleged legal rate paid by the officers of the School District to the Gas Corporation for gas furnished for lighting and heating school buildings in the School District.

In his first cause of action, relator alleged:

That the School District is a body corporate, organized and created under the laws of Oklahoma.[2]

That by Ordinance No. 149 of the city of Tulsa, Indian Territory, approved July 30, 1906, a natural gas franchise in the city of Tulsa, was granted to C. L. Reeder and others and their successors and assigns, for a term of twenty-five years and that § 11 of the franchise read as follows:

"For and in consideration of the privileges hereby granted by the city of Tulsa as aforesaid the said grantees, their successors, or assigns while continuing in the enjoyment thereof, shall furnish, free of expense to the said city of Tulsa, gas in sufficient quantities for lighting and heating the building used by the said city as a city hall, and all public school buildings used by said city and the inhabitants thereof for school purposes at four cents per thousand cubic feet, and said grantees agree to lay service lines to said city hall and school buildings or either of them upon demand of either the school board or city council."

That the Gas Corporation succeeded to such franchise and from the 31st day of July, 1926, operated under such franchise; that the School District is the successor by operation of law and by assignment to the provisions of the franchise obligating the Gas Corporation to furnish gas for use in such school buildings at 4 cents per thousand cubic feet; that the Gas Company is the successor to the Gas Corporation and has assumed all the enforceable liabilities of the Gas Corporation.

[1] A common informer statute.

[2] In Indian Territory prior to the advent of statehood (November 16, 1907) schools within the territorial limits of cities were under the jurisdiction, control, and management of the city as a body politic and there was no separate school district or body politic. On the advent of statehood each city became a separate school district, a body corporate under the name of "Board of Education of the City of ——, of the State of Oklahoma," wholly distinct from the city as a body politic. Grennan v. Carson (1910) 25 Okla. 730, 107 Pac. 925, 927, 928.

Section 6853, Okla. Stats. 1931 (Sess. Laws 1913, Chap. 219, Art. 6, § 1), 70 Okla. Stats. Ann. § 181 approved May 22, 1913, provides:

"Each city of the first class, . . . shall constitute an independent district and be governed by the provisions of this article."

Therefore, the present School District came into existence in 1913, and its predecessor on November 16, 1907.

That from July 31, 1926, the Gas Corporation was obligated to furnish gas to the School District for use in its school buildings at 4 cents per thousand cubic feet. That the Gas Corporation and its officers and employees conspired to defraud the School District by concealment and misrepresentation. That the Gas Corporation and its officers and employees concealed from the School District the fact that it was operating under such franchise and each month represented to the School District by false statements rendered for gas that the School District was obligated to pay for gas furnished in excess of the rate provided in § 11. That the School District was deceived by such representations and relied thereon in making payments for gas.

That the School District and its officers did not know of the provisions of § 11 or that the Gas Corporation was operating under such franchise at the time it made such excessive payments for gas, and did not learn thereof until shortly before the filing of the original petition herein.

That the amounts paid to the Gas Corporation from July 31, 1926, to October 6, 1931, for gas furnished for the period from July, 1926, to July, 1931, in excess of the price fixed by § 11, was $165,895.86.

That relator is a resident taxpayer of the city of Tulsa; that he, and more than ten other resident taxpayers of the School District, made written demands upon the officers of the School District to institute and diligently prosecute proper proceedings at law or in equity for the recovery of double the amount of such alleged excessive payments; that the board of education failed, neglected, and refused to comply with such demands; and that this action was commenced less than twelve months after such demands were made.

That the School District, the relator, and the other taxpayers did not learn of such conspiracy and fraud until within one year immediately prior to the filing of the original petition herein.

In the second cause of action relator realleged the allegation of his first cause of action and further alleged:

That since the termination of such ordinance, the Gas Corporation has continued to operate in the city of Tulsa under an implied agreement to pay the consideration provided in § 11 of the franchise.

That from July 30, 1931, to December 31, 1932, the Gas Corporation collected from the School District for gas furnished the sum of $41,802.36 in excess of the price fixed in § 11.

He further alleged a like demand upon and refusal by the officers of the School District as in the first cause of action.

In an amendment to the separate petition relator alleged:

That the Corporation Commission of the state of Oklahoma by order directed the holder of such franchise to comply with the consideration provision thereof when operating thereunder; and that such order was in effect during the period from July, 1926, to December 31, 1932; and that the Corporation Commission has never set aside or modified the provisions of § 11.

The Gas Corporation and the Gas Company interposed a demurrer to the separate petition and the amend-

ment thereto on the following grounds:

"(1) That this court has no jurisdiction of the subject of the action;

"(2) That plaintiff has no legal capacity to sue or maintain this action;

"(3) That said separate petition, together with the amendment thereto, does not state facts sufficient to constitute a cause or causes of action in favor of the plaintiff or against these defendants or either of them;

"(4) That said separate petition, together with the amendment thereto, shows upon its face that the alleged causes of action, if any, are barred by the statute of limitations in such cases made and provided."

The trial court sustained the demurrer on the first ground and overruled it on the second, third, and fourth grounds. Relator elected not to further plead and the separate petition was dismissed. Relator has appealed.

[1, 2] Sections 6831 and 6832, Okla. Stats. 1931 (Chap. 219, Art. 5, §§ 32 and 33, Sess. Laws 1913), 70 Okla. Stats. Ann. §§ 132, 133, read as follows:

"Every officer of any School District who shall hereafter order or direct the payment of any money or transfer of any property belonging to School District in settlement *of any claim known to such officers to be fraudulent or void,* or in pursuance of any unauthorized, unlawful, or fraudulent contract or agreement made or attempted to be made, for any School District, *by any officer or officers thereof,* and every person having notice of the facts with whom such unauthorized, unlawful, or fraudulent contract shall have been made, or to whom, or for whose benefit such money shall hereafter be paid, or such transfer of property shall be made, shall be jointly and severally liable in damage to all innocent persons in any manner injured thereby, and shall be furthermore jointly and severally liable to the School District affected for double the amount of all such sums of money so paid, and double the value of property so transferred, as a penalty to be recovered at the suit of the proper officers of such School District, or of any resident taxpayer thereof, as hereinafter provided." (Italics ours.)

"That upon the refusal, failure, or neglect of the proper officers of any School District, after written demand made upon them by ten resident taxpayers of such School District, to institute or diligently prosecute the proper proceedings at law or in equity for the recovery of any money or property belonging to such School District, paid out or transferred by any officer thereof, in pursuance of any unauthorized, unlawful, fraudulent, or void contract, made or attempted to be made by any of its officers for any such School District, or for the penalty provided in the section preceding, any resident taxpayer of such School District affected by such payment or transfer after serving the notice aforesaid, and after giving security for costs may, in the name of the state of Oklahoma as plaintiff, institute and maintain any proper action at law or in equity which the proper officer of the School District might institute and maintain for the recovery of such property, or for said penalty and any such School District shall, in such

event, be made defendant and one-half the amount of money and one-half of the value of the property recovered in any action maintained at the expense of a resident taxpayer under this section shall be paid to such resident taxpayer as a reward."

The above quoted statutory provisions are penal in nature and must be strictly construed.[3]

Relator's case is bottomed on the theory that the gas was furnished pursuant to § 11 and that the Gas Corporation should have based its charges therefor on the rate therein provided. He expressly alleges that the School District and its officers, at the times such payments were made, had no knowledge of such franchise. The claims which were paid consisted of monthly statements furnished to the School District by the Gas Corporation. By the express allegations of the complaint, they were not claims "known to such officers to be fraudulent or void," and therefore were not within the void or fraudulent claim provision of § 6831, *supra*.

It was admitted at the oral argument that the charges were based on the general rates for gas in the city of Tulsa fixed by order of the Corporation Commission and the gas furnished the School District was billed and paid for in accordance with those rates. They were not paid in pursuance of "any unauthorized, unlawful, or fraudulent contract" made by the School District or any officer thereof. They were paid pursuant to a valid administrative order having the force and effect of law. Neither the rate order nor the franchise provision were unauthorized, unlawful, or fraudulent. It was only a question of which was applicable. Furthermore, there was no bad faith or misfeasance on the part of the officers of the School District and we think the statute is only intended to apply where the officers knowingly act without authority, unlawfully or fraudulently.

We conclude the facts pleaded do not bring the case within the statute when strictly construed.

[3–6] As to the second cause of action which covers payments made after the franchise had expired, we think it clear no cause of action was stated. Under § 5 (a), Art. 18 of the Oklahoma Constitution (§ 13702, Okla. Stats. 1931) municipal corporations are prohibited from extending or renewing a franchise without the approval of the majority of the qualified electors residing within its corporate limits. Since the franchise was not so extended or renewed, § 11 ceased to be operative at the expiration of the franchise.

A contract rate fixed by agreement between a consumer and a public utility in Oklahoma is not invalid where the State Corporation Commission has not exercised its paramount power to fix the rates to be charged by such utility. The contract is binding on the parties only until such time as either of them invokes the jurisdiction of the Corporation Commission to fix a rate.[4]

The paramount power of the Cor-

[3] Bennington v. First National Bank (1935) 172 Okla. 164, 44 P. (2d) 872; State ex rel. Sweeney v. Oklahoma Nat. Gas Corp. (1936) 177 Okla. 62, 57 P. (2d) 626; State ex rel. Jennings v. Ray (1936) 87 F. (2d) 181.

[4] American Indian Oil & Gas Co. v. George F. Collins & Co. 157 Okla. 49, P.U.R. 1932C, 267, 9 P. (2d) 438, 441; Huffaker v. Fairfax (1925) 115 Okla. 73, 242 Pac. 254, 256.

poration Commission to fix the rates exists even where the contract rate is agreed to as a consideration for the public utility's franchise. Durant v. Consumers' Light & P. Co. (1918) 71 Okla. 282, P.U.R.1919C, 46, 177 Pac. 361.

Where the Corporation Commission has exercised its jurisdiction to make a general rate order, it may not exempt therefrom and leave in force a contract rate.

In American Indian Oil & Gas Co. v. George F. Collins & Co. 157 Okla. 49, P.U.R.1932C, 267, 272, 9 P. (2d) 438, 442, the court said:

"There is thereby presented the question of whether or not the Corporation Commission could provide a schedule of rates to be charged for gas in the city of Poteau and vicinity and at the same time, by express order, leave in existence and controlling a rate fixed by contract between the public utility and a consumer. Our answer thereto is that there is no such power in the Corporation Commission. The purpose of the legislation as stated in the decisions cited is to prevent such action and to require uniformity in rates to be charged by public utilities distributing and selling gas."

Section 3626, Okla. Stats. 1931 (Chap. 10, § 1, Sess. Laws 1913), 17 Okla. Stats. Ann. § 121 provides:

"The Corporation Commission is hereby vested with the power of a court of record to determine: First, the amount of refund due in all cases where any public service corporation, person, or firm, as defined by the Constitution, charges an amount for any service rendered by such public service corporation, person, or firm in excess of the lawful rate in force at the time such charge was made, *or may thereafter be declared to be the legal rate which should have been applied to the service rendered;* and, second, to whom the overcharge should be paid." (Italics ours.)

In passing on the validity of § 3626, the supreme court of Oklahoma in Pioneer Teleph. & Teleg. Co. v. State (1914) 40 Okla. 417, 138 Pac. 1033, 1034, said:

"Section 1, Art. 7 (§ 186, Williams' Anno. Ed.), of the Constitution of this state, provides that: 'The judicial power of this state shall be vested in the senate, sitting as a court of impeachment, a supreme court, district courts, county courts, courts of justices of the peace, municipal courts, and such other courts, Commissions, or boards inferior to the supreme court, as may be established by law.'

"The Corporation Commission, as created by Art. 9, is a body with, so far as the regulation of public service corporations is concerned, executive, judicial, and legislative powers.

"By virtue of said § 1, Art. 7, and the provisions of Art. 9, the Corporation Commission has authority to exercise all of these powers with a view of carrying out the general purposes for which the Corporation Commission was created, to wit, to regulate public service corporations and provide against abuse, discrimination, and excessive charges and for the refunds thereof. Anything that is in furtherance of that purpose is within the contemplated view of its creation and is not in violation of § 1, Art. 4, of the Constitution."

The trial court was of the opinion

that § 3626, *supra*, vested exclusive jurisdiction in the Corporation Commission to determine the amount, if any, which the Gas Corporation had charged the School District for gas furnished, in excess of the lawful rate or in excess of what the Corporation Commission should declare to be the legal rate.

While we have found no case directly in point the cases cited in the subjoined note tend to support the views of the trial court.[5]

The judgment is affirmed.

[5] In Smith v. Corporation Commission, 101 Okla. 254, P.U.R.1924E, 783, 787, 225 Pac. 708, 709, the Court said:

"It has jurisdiction to supervise, regulate, and control public utilities in so far as their public duties are concerned, and to establish rates to be charged by them for a public service, and, if rates in excess of those established are collected, it has the authority to adjust controversies between the utility and the consumer by determining the amount of refund due the consumer, and to whom the same should be paid, and it may enforce the payment of such overcharge in the same manner that fines and penalties imposed by it are authorized to be collected by law, and, when such overcharge is collected, it shall be by the Commission paid to the parties to whom it is due."

See, also, St. Louis-S. F. R. Co. v. State (1921) 81 Okla. 298, 198 Pac. 73, 76; Muskogee Gas & E. Co. v. State, 86 Okla. 58, P.U.R.1922E, 514, 206 Pac. 242.

It was held in Atchison, T. & S. F. R. Co. v. State, 85 Okla. 223, P.U.R.1922D, 450, 206 Pac. 236, 241, that under § 3626 (17 Okla. Stats. Ann. § 121), *supra*, the Commission could fix the legal rate for past service and award a refund for the excess over such rate charged therefor.

In Chicago, R. I. & P. R. Co. v. Brown (1924) 105 Okla. 133, P.U.R.1925C, 547, 232 Pac. 43, it was held the Corporation Commission has exclusive jurisdiction to determine whether a rate charged for a service was reasonable and that a state district court is without jurisdiction to entertain an action to determine a reasonable charge for such service and to recover the amount charged in excess thereof.

In St. Louis & S. F. R. Co. v. State (1925) 116 Okla. 95, P.U.R.1926E, 443, 244 Pac. 440, in a refund case it was held the Corporation Commission had jurisdiction to determine which of two rates, was applicable.

NEW HAMPSHIRE PUBLIC SERVICE COMMISSION

Re Rules Relating to Tariffs and Forms of Contract or Agreement

[I-4177, Order No. 3295.]

Rates, § 234 — Tariffs — Rules and regulations.

1. Utilities filing tariffs should be given definite instructions to govern the form and detail and instructions as to posting and filing suitable for present usage, in order to avoid ambiguous terms or doubtful application and application of rates which are not legal, p. 138.

Rates, § 253 — Schedules — Form and detail.

2. Tariffs on file with the Commission are the contracts between the utilities and the public and, as such, warrant careful preparation as to form and detail, notwithstanding the desirability of simplification, p. 139.

Rates, § 253 — Schedules — Availability clauses — Electric service.

3. The Commission favors the term "General Service" instead of the term

"Commercial," with an availability clause making such rates all inclusive except for such services as are otherwise specifically provided for under different restrictive terms such as "Domestic," p. 139.

Service, § 176 — Extension rules.

4. Every utility should file with the Commission, as a part of its general tariff, a rule setting forth the basis upon which line or main extensions will be made, so as to eliminate the opportunity for discrimination between prospective customers, p. 139.

Rates, § 238 — Tariff of minimum charges — Line extensions.

5. A tariff of minimum charges should be filed for each line extension, since such tariffs not only remove the need for contracts, but furnish the Commission with easily accessible information with which to handle complaints and follow the progress of such extensions, p. 139.

[May 4, 1937.]

INVESTIGATION *of proposed rules and regulations governing the preparation, filing, and publication of tariffs or schedules of rates, forms of contract, and rules and regulations relating to rates; rules and regulations adopted.*

APPEARANCES: For the Meriden Electric Light & Power Company, H. W. Chellis; for the White Mountain Power Companies: Alton Electric Light & Power Company, East Andover Light & Power Company, Goodrich Falls Electric Company, Hill Light & Power Company, Meredith Electric Light Company and Pemigewasset Electric Company, Burdette A. Johnson and Niles O. Jackson; for the New Hampshire Gas & Electric Company and Derry Electric Company, F. W. Randall; for the Public Service Company of New Hampshire and Twin State Gas & Electric Company, Roger G. Mosscrop; for the New Hampshire Power Company, Paul Hatch; for the Connecticut River Power Company, Bellows Falls Hydro-Electric Corporation and Granite State Electric Company, F. P. Jackson and Jesse E. Gray; for the Exeter & Hampton Electric Company and Concord Electric Company, F. S. Clifford; for the White Mountain Power Company, B. G. Sparks; for the Manchester Gas Company, Walter N. Africa; for the Claremont Gas Light Company, Charles S. Morgan; for the Concord Gas Company, A. J. Smith; for the Exeter Water Works Company, C. E. Waldron and George G. Bean; for the Pennichuck Water Works, William F. Sullivan and Arthur Graves; for the Laconia Water Company, N. J. Harriman and A. C. Kinsman.

SWAIN, Commissioner:

Authority to Prescribe Rules Governing Tariff Filing and Publication

The authority of the Commission to prescribe rules governing the preparation, filing, and publication of tariffs or schedules of rates, forms of contract or agreement, and rules and regulations relating to rates is granted by P. L. Chap. 242.

Pursuant to this authority the Com-

mission issued its Order No. 15, November 1, 1911, and Order No. 73, June 20, 1912.

Need for Revision of Rules

[1] The aforementioned orders in general recited the statute with certain instructions as to filing and posting, but contained no instructions as to form and detail. Under these orders, tariffs have been received on all sorts of stationery, printed, typewritten, or in longhand. Many tariffs have failed to conform to the plain requirements of legal documents as to authoritative issuance. Many rates intended by the tariff maker to apply to a period of a month or a year have not been so limited by tariff. The application of rates has not always been clearly defined leaving their assessment and interpretation in many instances to the discretion of the billing agent.

Under the law no public utility is permitted to charge or receive a different compensation for any service rendered than that fixed by the schedules on file with the Commission and in effect at the time such service is rendered. (P. L. Chap. 242, § 15.) The Commission is empowered to order reparation where it finds the charges assessed unjust or unreasonable and to order a refund of charges assessed in excess of those which would accrue under the applicable rate. Therefore, the Commission must act as the interpreter of the rates filed. (See P. L Chap. 238, § 27.)

Certain well-defined principles govern the matter of interpretation of rate schedules. Ambiguous terms or doubtful application are resolved against the tariff maker. Although the cases of interpretation coming before this Commission have been relatively few—the public generally accepted the billing of the utility as correct—a sufficient number have been before the Commission to indicate that the matter might result in serious changes in revenue to both the public and the utilities.

In various instances it has come to our attention that rates are charged an entire class of customer clearly outside any of the service classifications or availability clauses provided by the tariffs. Sometimes the interpretation is by analogy or by similarity of service characteristics. In the final analysis in some cases the service has been rendered with no legal rates applicable.

Obviously, the deficiencies cited require that the utilities filing tariffs be given definite instructions to govern the form and detail and revised instructions as to posting and filing more suitable for present usage than the instructions given twenty-five years ago. Recognizing the need the Commission late in 1935 drafted a proposed set of rules to govern rate schedules.

Revision of Proposed Rules

Copies of the proposed rules were served on the electric, gas, and water utilities operating in the state setting the date for conferences for the purpose of consideration of the rules proposed and inviting criticism and suggestions. These conferences were held on November 20th, in the case of electric utilities, November 21st, gas utilities, and November 22nd for water utilities. Many minor changes were suggested, most of which have

been incorporated in our final draft of the rules. The gas and water utilities, aside from minor changes in wording, voiced no objections to the rules as originally proposed.

[2] Certain of the electric utilities urged that the rules be made as simple as possible, and one utility suggested the use of the rules in effect in Massachusetts, and submitted certain of its tariffs filed thereunder. However, such rules are very general in character and, in our opinion, would fail to change materially the situation which has existed heretofore. Satisfactory tariffs might be filed under such rules by some utilities, but the instruction and guidance which we believe necessary is lacking. It is our desire to make our rules as easily workable as is possible consistent with the ends we desire to achieve, and for this reason to issue rules in loose leaf form providing for easy alteration, modification, addition, cancellation, or other correction. Therefore, though sympathetic to the idea of simplification, we cannot at this time lessen the requirements set forth in the rules herein adopted. The tariffs on file with the Commission are the contracts between the utilities and the public and, as such, warrant careful preparation as to form and detail.

Since the conferences late in 1935, many of the utilities have filed tariffs in substantial compliance with the rules at that time proposed. The past year, without an order putting such rules in effect, has permitted a period for experiments which have not been without benefit to the public, the utilities, and the Commission. A substantial improvement in the tariffs has been noted.

[3] During the year the Commission and many of the utilities have been seeking to find availability clauses which would more nearly describe the service intended to be offered or by interpretation actually being rendered, the public. As an illustration, the Commission and many utilities favor the term General Service instead of the term Commercial, with an availability clause making such rates all inclusive except for such services as are otherwise specifically provided for under different restrictive terms, such as "Domestic." Although the old Commercial rates were in many instances used to apply to all types of service not elsewhere specifically named in the tariff, such as schools, churches, charitable institutions, and many other services, their designation as Commercial was, to say the least, far-fetched. This situation appears to be capable of correction by proper availability clauses under the designation "General Service."

It is not expected that perfection has been achieved by these rules, but we have made a start which promises to correct many of the situations heretofore existing. Further improvement should come through years of actual usage.

Extensions of Service

[4, 5] The rules herein adopted provide that every utility shall file with the Commission as a part of its general tariff a rule setting forth the basis upon which line or main extensions will be made. The purpose of the rule is to eliminate the opportunity

for discrimination between prospective customers which might be due to personal preferences or prejudices. With the tariff holding out to the public the basis on which extensions will be made, the public may demand, as a matter of right, any extension complying with the terms named. In anticipation of our requirement becoming effective, virtually all of the electric utilities in recent months have filed in their tariffs rules covering line extensions which appear to be functioning to the benefit of the public.

Heretofore extensions made which require a guaranteed minimum revenue have been handled by special contract. Ordinarily such contracts have been based on a monthly minimum higher than the minima provided by the rates of general application. The law provides that such contracts be filed with this Commission, but the manner of handling has been far from satisfactory both from the viewpoint of the Commission and the public. Questions as to the effective or terminating dates of such contracts are constantly raised as is the matter of the amount of guaranties when a new customer takes service on a guaranteed extension. In addition the actual cost of line extensions has frequently been questioned. However, due to their large number, the filing of such contracts has presented difficulties.

The rules herein adopted provide that a tariff of minimum charges be filed for each line extension. These tariffs, not only remove the need for contracts, but furnish the Commission with easily accessible information with which to handle complaints and follow the progress of such extensions, to an extent not hitherto possible.

Contracts

There further is provided rules governing the form and filing of contracts, at rates other than those of general application, including contracts between utilities. The method of handling heretofore has proven unsatisfactory in many instances both as to form and filing. We are of the opinion that these rules will remedy this situation.

Conclusion

In general we believe these rules will correct many of the deficiencies heretofore found to exist in the preparation, form, and filing of tariffs and contracts. Changes will be made from time to time as they appear necessary or desirable. Our order will require that all tariffs or contracts hereafter filed comply with these rules. As previously stated, many tariffs and contracts now on file are in substantial compliance. For this reason we are not requiring the refiling of all tariffs and contracts at this time, but will by letter direct the refiling of such tariffs and contracts as we find, after investigation, to be unsatisfactory under these rules.

Smith and Barry, Commissioners, concurred.

ORDER No. 3295

Upon consideration of the foregoing report, which is made a part hereof, it is

Ordered, pursuant to P. L. Chap. 242, that the rules and regulations set forth in the pamphlet entitled "Rules Applying to Utilities Supplying

Light, Heat, Power, or Water to the Public Governing the Construction, Filing, and Publication of Tariffs or Schedules of Rates, Forms of Contract or Agreement, and Rules and Regulations Relating to Rates," which is hereby made a part of this order, are established and prescribed for use by said utilities; and it is

Further ordered, that said rules and regulations shall become effective July 1, 1937, thereby revoking all previous orders of this Commission relating to the same subject matter.

COLORADO PUBLIC UTILITIES COMMISSION

Re Swift Moving & Storage Company

[Application No. 1295–A, Decision No. 10347.]

Certificates of convenience and necessity, § 141 — Transfer — Effect of dissolution of holder corporation.

1. A certificate of convenience and necessity granted to a motor carrier corporation cannot lawfully be transferred to another after the corporation has been dissolved, declared defunct by the secretary of state, and its operation under the certificate abandoned, p. 142.

Certificates of convenience and necessity, § 152 — Grounds for revocation — Corporate dissolution.

2. A certificate of convenience and necessity granted to a motor carrier corporation which had gone out of business and been declared defunct and inoperative by the secretary of state should be revoked because of abandonment of operations under the certificate and lack of capacity on the part of the corporation to operate, p. 142.

[July 20, 1937.]

APPLICATION *to transfer certificate of convenience and necessity; application denied and certificate revoked.*

APPEARANCES: Marion F. Jones, Denver, for the applicants; J. F. Rowan, Denver, for the Colorado Transfer & Warehousemen's Association; Zene D. Bohrer, Denver, for The Motor Truck Common Carriers Association; A. J. Fregeau, Denver, for Weicker Transportation Company.

By the COMMISSION: From the *application* filed herein the Swift Moving and Storage Company seeks authority to transfer Certificate No. 339 to the Custard Coal and Timber Company, Inc.

From the *testimony* given at the hearing it would appear that A. L. Mayer, a trustee for the stockholders of the Swift Moving and Storage Company desired authority to transfer said certificate to the Custard Coal and Timber Company.

Mr. Rowan moved to have the application dismissed, for the reasons

that it failed to meet the requirements of Rule 4 of "Rules and Regulations Governing Motor Vehicle Carriers" in that the application did not contain a verified statement naming the consideration for the transfer, and setting forth the creditors, if any; that it did not meet the requirements of Rule 21; and that the application did not meet with the requirements of Rule 24, requiring the filing of reports, which motion was taken under advisement.

R. J. Custard, president of the Custard Coal and Timber Company, Inc., testified that the Articles of Incorporation of his company was on file in Application No. 2422-PP which was made a part of the record; that in the event this transfer was granted his company desired to have their present permit B-989 canceled; that he had agreed to pay $500 for this certificate in the event of a transfer; that he had eight trucks, all being 1936 or 1937 Chevrolets and Fords, valued at $10,000, against which trucks there was an aggregate of $2,700, and in addition his yard and yard equipment, worth approximately $1,900, against which there were current bills of $900; and that he would take up the transferor's obligations up to the sum of $500 and would assume and pay all obligations incurred in connection with the operations conducted under Certificate No. 339, since May 10th, and until a transfer is made, if authorized.

Mr. Custard further testified that on May 10, 1937, he transferred to the Swift Moving and Storage Company one 1936 Chevrolet truck for which one Murray Ownbey, an insurance agent gave him $625 in cash; that he had not furnished money for transaction and didn't know who did; that truck since transfer had been kept at Custard's place of business, 3262 Blake street; that it has been operated by one of Custard's drivers, Custard paying him for his services.

[1, 2] L. A. Mayer, director of the Swift Moving and Storage Company, original holder of Certificate No. 339, testified that there were no outstanding unpaid obligations of the original Swift Moving and Storage Company, or the trustees of this company since its dissolution; that the company as such had done no business since 1933, having *decided to go out of business* on account of the depression and a lack of finances; that the last directors were L. A. Mayer, Mabel Fay, and Catherine Mayer, L. A. Mayer being the owner of all the outstanding capital stock and the other two named directors being the holders of merely shares enough to qualify them; that before the dissolution of this company, the directors authorized L. A. Mayer by contract, signed by himself as president to himself as an individual, consideration $1, *to dispose* of Certificate No. 339; that assets were converted into cash and all accounts settled in full during *1933*, and that the company had had *no business office since that time*, except the present residence of L. A. Mayer, 400 Dexter street, Denver, Colorado; that since quitting business in 1933, on or about October 15, 1936, the Swift Moving and Storage Company was declared *defunct and inoperative*, by the secretary of state.

Pursuant to the provision of § 83 of Chap. 41, Anno. Stats. of Colorado, 1935, that corporate life had not been revived; that Murray Ownbey, acting

agent for Swift Company, advanced $625 to buy a Chevrolet truck from Custard Coal and Timber Company, Inc., transferee herein, and arranged for the insurance and other things he considered necessary to place Certificate No. 339 in good standing; that no business was transacted and no road tax had been paid during the years 1934, 1935, 1936, and 1937.

Under our rules and regulations, where a corporation is the applicant for a certificate of public convenience and necessity, it must file a certified copy of its Articles of Incorporation, not only showing that it is authorized to, but is exercising its corporate rights and privileges and that, among its corporate rights and privileges, it is authorized to engage in a transportation business. Apparently applicants think that if applicant was qualified when it applied for and received certificate, its right to exercise and transfer the privileges granted by certificate is not affected by its dissolution. In the instant case, the evidence disclosed that the corporation, as heretofore stated, "decided to go out of business" and dissolve company; that it was declared defunct; that its corporate life has not been revived and it is not now qualified to carry on any business as a corporation under the law of the state of Colorado. Mr. Mayer, as a surviving director, was not authorized to carry on the business of the company or to revive the business. By arrangement with someone, Mr. Murray Ownbey is said to have paid $625 to transferee for an automobile to be registered in the name of a defunct corporation in order that insurance might be procured thereon and filed with the Commission, to give the appearance of life in and activity by a nonexistent corporation.

In Re Schwank (1932) 9 (No. 18) Colo. P. U. C. 423, 425, the Commission held that one to whom a certificate of convenience and necessity is issued has a duty, as well as a privilege, to perform and that if he has failed for a substantial time to operate under his certificate, he has nothing to transfer. The Commission said:

"It has become elementary that one who is granted a certificate not only has a privilege but a duty, and a failure to perform that duty so far as cessation of operation is concerned results in an abandonment of the certificate, warranting cancellation thereof by the Commission.

"In Re Hart, 7 (No. 18) Colo. P. U. C. 776, P.U.R.1927E, 727, it was stated 'that Hart has not operated as a common carrier over the particular lines in question for the past year.' For that reason the Commission held that it was required to cancel the certificate. To the same effect is Re Gisi (1930) 8 (No. 18) Colo. P. U. C. 1532."

After careful consideration of the record herein, the Commission is of the opinion and finds that the application for transfer should be denied and that abandonment of operations under said certificate and lack of capacity on the part of Swift Transfer and Storage Company to operate, warrants a revocation of Certificate No. 339.

ORDER

It is therefore *ordered*, that authority to make the transfer herein as prayed, be and the same hereby is denied.

It is *further ordered,* that the certificate of public convenience and necessity heretofore issued to Swift Moving & Storage Company, Inc. in Application No. 1295, Decision No. 2163 (P. U. C. 339) should be and the same hereby is canceled and revoked and held for naught.

COLORADO PUBLIC UTILITIES COMMISSION

Re John Shull, Doing Business As Shull Truck Line

[Case No. 2006, Decision No. 10342.]

Certificates of convenience and necessity, § 155 — Revocation — Effect of property transfer.

1. The fact that a person has arranged to purchase carrier permits and has advanced money to the holder of the permits and become identified with the operation of the carrier without authority of the Commission and is apparently operating the line, without supervision or connection of the permit holder, cannot be considered by the Commission in disposing of an application for rehearing on an order revoking the permits, p. 145.

Certificates of convenience and necessity, § 137 — Unauthorized transfer — Rights of transferee.

2. One who has acquired an interest in the property of a motor carrier operating under a permit should not part with his money until the transfer is authorized; his operation under the permit without prior permission and authority of the Commission is unlawful and he should not be allowed to predicate a claim of right to or request for relief from the Commission upon such unlawful operation, where the operating authority has been revoked because of unlawful practices of the permit holder, p. 145.

Procedure, § 33 — Rehearing — Sufficiency of petition.

3. A motion that an application for rehearing be stricken from the files was well taken where urged on the ground that no matters were set forth wherein the Commission had erred as a matter of law, that the application had not been filed within the time or in the form required by the Public Utilities Act, and that the applicant had failed to recite any reasons why the applicant considered the decision or order of the Commission unlawful, p. 145.

[July 16, 1937.]

APPLICATION *for rehearing in proceeding wherein motor carrier permits had been revoked by Commission; rehearing denied.*

APPEARANCES: Marion F. Jones, Denver, for applicant; T. A. White, Denver, for Robert Colman, d/b/a Colman Freight Service; Zene D.

Bohrer, Denver, for Colman Freight Service; A. J. Fregeau, Denver, for Weicker Transportation Company; John F. Rogers, for J. S. Brown Mercantile Company.

By the COMMISSION: On December 21, 1936, Decision No. 9134, the above-styled matter, the Commission, on its own motion, directed that a complaint be instituted against respondent, John Shull, for violating the rules and regulations of the Commission governing private carriers by motor vehicle by failing to account for C.O.D. shipments received and collected by him, as provided by Rule 25, Rules and Regulations of the Commission, effective September 1, 1936, and requiring him to show cause within ten days from the date thereof, if any be had, why said permit should not be revoked or suspended on account of the aforesaid violations.

On May 13, 1937, Decision No. 9984, said respondent having admitted the allegations contained in the aforesaid decision, No. 9134, the Commission, after considering the matters offered by him in mitigation at the hearing, revoked said Permits Nos. A-630 and A–839.

[1–3] On May 24, 1937, Marion F. Jones, as attorney, filed application for rehearing on behalf of respondent and Mr. J. A. Schaeffer, alleging as ground for rehearing, "that Commission had overlooked the fact that respondent was a victim of circumstances"; that "the punishment inflicted is unusual and without precedent"; and that "the respondent made every endeavor to pay said C.O.D.s and has paid a majority of the amount involved." And further, that one J. A. Schaeffer, about March 1, 1937, entered the employ of the respondent as manager and about the middle of April, 1937, arranged to purchase said Permits A–630 and A–839 from said Shull and had advanced some moneys to Shull, had paid some of the C.O.D.s and had paid Shull $125 for his equity in the line and since that time had managed and operated the Shull Truck Line; that said Schaeffer would lose some money if said permits were not reinstated and transfer thereof allowed to Schaeffer, as prayed for in the application filed by said Shull and Schaeffer for said transfer and some creditors might fail to receive their C.O.D. returns and that the town of Climax would be without freight service by truck.

The matter was set for argument upon application for rehearing on June 2, 1937, and argued on said date.

Prior to the commencement of argument, the Colman Freight Service, by its attorney, moved that said application for rehearing be stricken from the files chiefly because no matters were set forth wherein the Commission had erred as a matter of law and because said application had not been filed within the time nor in the form required by § 51 of the Public Utilities Act, and that applicant therein failed to recite any reasons why applicant considered the decision or order of the Commission unlawful. Thereupon, counsel for Schaeffer (and Shull) waived that part of application for rehearing which involved Permit No. A–839 and asked that rehearing be had upon the question of reinstating Permit No. A–630 limited to service between Denver, Leadville, and Climax, his argument in support

thereof being addressed particularly to the inconvenience and loss of money that might be entailed by said Schaeffer, should said request be denied and transfer of said permit not allowed, he stating that if Shull were here and alone affected by order, counsel might not be disposed to urge that the order be set aside (apparently recognizing the probable justice of Commission's order as applied to Shull) but, in his opinion, Schaeffer and the C.O.D. creditors of Shull should not lose.

Counsel for protestants and interveners contended that the matters urged by counsel for Shull and Schaeffer could not properly be considered by the Commission; that Schaeffer and C.O.D. customers were not properly or otherwise parties to the proceedings instituted by the Commission to cancel the permits. There was a clear violation of rule of the Commission that the failure to keep C.O.D. collections in a separate fund and remit therefor within five days after the delivery of a shipment.

It would seem clear that the fact that Mr. Schaeffer has become identified with the operations of the Shull Line without authority of the Commission, since April, 1937, and apparently is operating it as his, without supervision or connection of Shell, cannot be considered by the Commission in disposing of the application for rehearing. Rule 7 of the Commission, effective September 1, 1936, provides that:

"No private carrier by motor vehicle shall sell, assign, lease, encumber, or transfer his or its permit unless and until application has been made to and authority obtained from the Commission to so do."

Application for transfer was filed on April 20, 1937; transferee should not have parted with his money until the transfer was authorized and his operations under the permits without prior permission and authority of the Commission was unlawful and we do not believe that he should be allowed to predicate his claim of right to or request for relief from the Commission upon such unlawful operation.

Counsel is in error in stating that we overlooked the fact that respondent was a victim of circumstances and failure to account for or pay over C.O.D.s was due to acts of a trusted employee. It is true that applicant so contended at the hearing. But, it is also true that the Commission considered his claim. The Commission said:

"It does not seem possible that any reasonably careful man would so conduct his business as to allow numerous C.O.D. accounts to be held months without knowing something about it, especially so since Rule 25 of the Rules and Regulations of the Commission, which specifically provides that C.O.D. funds be kept in a separate fund and remittances made therefor within five days after the delivery of a shipment, is so easily understood.

"The record and the testimony show a flagrant violation of the rules of the Commission and cannot be explained away by expressions of good intentions and overconfidence in an employee."

We also believe it evident that the petition for rehearing is not legally sufficient to justify granting a rehearing and that the motion of counsel for Colman Truck Line, in which other protestants and interveners joined, was well taken.

After careful consideration of the petition, as filed, and each and every allegation and statement therein contained, the Commission is of the opinion and finds that said petition for rehearing should be denied.

PENNSYLVANIA SUPERIOR COURT

Francis Hatmaker, Doing Business As Leader Telephone Company

v.

Public Service Commission

(— Pa. Super. Ct. —, 193 Atl. 123.)

Appeal and review, § 44 — Commission decisions — Certificate to competing company.

1. An order of the Public Service Commission granting to a telephone company the right to furnish service in a designated area, over the objection of another telephone company, relates to an administrative matter such as an appellate court will not reverse unless a clear and manifest abuse of discretion appears or the order is not in conformity with law, p. 148.

Consolidation, merger, and sale, § 10 — Powers of Commission — Compulsory merger.

2. The Commission has no power to compel a merger of telephone companies although such merger might be to the general advantage of the patrons, p. 148.

Certificates of convenience and necessity, § 85 — Grounds for denial — Unauthorized operation — Objection by competitor.

3. The Commission acted neither unreasonably nor contrary to law in approving an application by the operator of a telephone line for a certificate of convenience and necessity to operate in territory where she had been operating for several years without authority, where an objector to such grant of authority, appealing from the order of the Commission, had himself illegally operated for many years and had himself helped to organize the rival line, p. 149.

[July 15, 1937.]

APPEAL *from Commission order approving the operation of a telephone line; appeal dismissed and order affirmed. For Commission decision, see 15 P.U.R.(N.S.) 407.*

Argued before Keller, P. J., and Cunningham, Baldrige, Stadtfeld, Parker, James, and Rhodes, JJ.

APPEARANCES: Frank Slattery, Jr., and Stephen Teller, both of Wilkes-Barre, for appellant; Harry H. Frank

and John C. Kelley, Legal Assistants, both of Harrisburg, Samuel Graff Miller, of Harrisburg, Assistant Counsel, and Edward Knuff, of Ebensburg, Counsel, for appellee.

PER CURIAM: [1] The order of the Commission appealed from relates to an administrative matter, such as an appellate court will not reverse unless a clear and manifest abuse of discretion appears or the order is not in conformity with law. Neither ground for reversal is present in this case.

Suscon Telephone Company has been furnishing telephone service to a small number of patrons in Pittston township, Luzerne county, since 1915, as a service telephone line connected with the Bell Telephone Company of Pennsylvania at its Pittston switchboard.

Francis Hatmaker, who was one of the organizers of the Suscon Telephone Company, has, since 1919, been operating in Pittston township a competing service telephone line under the name of the Leader Telephone Company. It, too, is connected with the Bell Telephone Company's switchboard at Pittston. Through the Bell switchboard the subscribers of each service line can talk to the subscribers of the other. Neither company, until very recently, had applied for or secured from the Public Service Commission a certificate of public convenience authorizing it to operate a telephone line, but Suscon Telephone Company, since 1918, has filed with the Commission its tariff or schedule of rates.

In 1934, Hatmaker applied to the Commission for a certificate of public convenience evidencing its approval of the telephone service which he had been rendering illegally since 1919. Mrs. John P. Burke (Edna Webb Burke), who is now the owner and operator of Suscon Telephone Company, appeared but did not contest the application, and it was granted.

In 1936, Hatmaker filed a complaint with the Commission that Mrs. Burke, trading as Suscon Telephone Company, was illegally furnishing telephone service, without having obtained the approval of the Commission, and was charging less than the scheduled rate; whereupon the respondent appeared and denied any violation of law, but admitted furnishing telephone service as above, without a certificate of public convenience, not being aware that it was necessary. At the same time she applied to the Commission for a certificate of public convenience evidencing its approval of the telephone service she had been rendering since 1915.

The Commission found that the respondent had not been charging less than the scheduled rate, sustained the complaint in so far as it related to the illegal operation as a public service company, but approved the application of Mrs. Burke, trading and doing business as Suscon Telephone Company, for the right to furnish telephone service in the area described in her amended application, as necessary for the service, accommodation, and convenience of the public.

From the order approving this application, Hatmaker appealed.

[2] It may well be that it would be to the general advantage of the patrons of these two small service lines—the complainant has eleven subscribers and

the respondent ten—if they were merged into one company, but the Public Service Company Law (66 PS, § 471 et seq.) gives the Commission no power to compel such a merger; it has authority only to approve a merger when agreed upon by the parties.

[3] On the other hand, the circumstances are not such as to require the Commission to work the practical confiscation of the one by the other. Citizens Mut. Teleph. & Teleg. Co. v. Public Service Commission, 93 Pa. Super. Ct. 373, 377, P.U.R.1928D, 578; Harmony Electric Co. v. Public Service Commission (1922) 78 Pa. Super. Ct. 271, 282. An appellant, who himself illegally operated a telephone service line for fifteen years, is in no position to ask very rigorous treatment of a rival line, which he himself helped to organize, conducting a similar service for a longer period, when it seeks to validate its operation.

It is probable that, at the outset, neither one understood that the telephone service it was conducting required a certificate of approval from the Commission. The fact that the appellant acted two years before the respondent in securing such approval did not constitute the latter an outlaw, whose business could be confiscated. Certainly the Commission acted neither unreasonably nor contrary to law in validating the rendering of service as it has existed for over twenty years.

We have confined our discussion to the only question raised in the appellant's statement of questions involved.

The appeal is dismissed and the order of the Commission is affirmed.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Carter K. Henry

v.

Penn Central Light & Power Company

[Complaint Docket No. 11375.]

Payment, § 47 — Service denial to enforce — Effect of deposit.

A public utility company has the right to discontinue service for nonpayment of a monthly bill although it has in its possession a deposit by the customer in excess of the amount of the bill, where the company's tariff provides that it may discontinue service in case of nonpayment of a bill and that a deposit can be appled only to a final billing after service is discontinued.

[August 2, 1937.]

COMPLAINT *against discontinuance of service for nonpayment of a bill; dismissed.*

By the COMMISSION: The gravamen of this complaint is that respondent, Penn Central Light & Power Company, unreasonably discontinued electric service to complainant's residence near Hollidaysburg for nonpayment of a bill for previously rendered service. Complainant alleges that said discontinuance was unreasonable because at the time thereof respondent had in its possession a deposit by complainant greater in amount than the unpaid bill, which was intended to guarantee all complainant's unpaid bills, but which deposit was not applied to the instant bill by respondent before disconnecting service.

At the hearing in the case, held July 28, 1937, complainant admitted that at the time when service was discontinued, namely, April 13, 1937, he had not paid respondent the last monthly bill rendered March 13, 1937, amounting to $2.79; that he had been given ample notice of respondent's intention to disconnect unless payment of the bill was made; that the amount of the bill was not in dispute.

A representative of respondent company admitted possession of a deposit by complainant amounting to $5, but stated that the deposit, as provided by the rules and regulations of the company, was intended to guarantee only unpaid final bills of consumers, and could not be applied to unpaid current bills. He testified further that service to complainant was discontinued for a period of three hours and was then resumed upon payment by complainant of the bill rendered March 13, 1937.

The tariff of respondent in effect at the time of this occurrence provided that respondent could discontinue its service in case of nonpayment of a bill, and that a deposit could be applied by respondent only to a final billing, after service was discontinued.

In view of the above the Commission finds that respondent has acted reasonably, under the circumstances disclosed by the record, in refusing to continue to serve complainant except upon terms which it was satisfied would protect it and the other customers of its service.

INDIANA PUBLIC SERVICE COMMISSION

Re House Trucking

[No. 685–B–2.]

Monopoly and competition, § 40 — Grounds for disapproving competition — Rate cutting.

Granting authority to operate motor vehicles as a contract carrier is not in the public interest when the rates which the applicant proposes to charge do not bear a reasonable relationship to the rates of common carriers for substantially the same service and such rates would give advantage or preference to the applicant in competition with common carriers.

[July 9, 1937.]

RE HOUSE TRUCKING

APPLICATION *for permit to operate motor vehicles as a contract carrier; denied.*

APPEARANCES: H. A. Hollopeter, Terre Haute, for petitioner; J. A. Van Osdol, Anderson, I. R. R.; Bowman Elder, Receiver, I. S. C.; Public Service Co. of Indiana, Bowman Elder, Receiver, Lessee; O. R. Livinghouse, Attorney, Indianapolis, N. Y. C. & St. L. R. R. et al., for protestants.

By the COMMISSION, Stuckey, Examiner:

On the 13th day of April, 1937, House Trucking, 927 Poplar street, Terre Haute, Indiana, filed a verified application with the Public Service Commission for a permit to operate motor vehicles as a contract carrier of beer and beer containers, intrastate, over and upon the following routes, to wit:

All highways and to all cities and towns in Indiana.

Pursuant to notice published in *The Hoosier Sentinel,* and *The Irvington Review* and *Irvingtonian,* two newspapers of general circulation printed and published in Indianapolis, Marion county, Indiana, and notice of the time and place of said hearing, given by the Commission in accordance with the provisions of § 7, Chap. 287 of the Acts of the 1935 general assembly of the state of Indiana, more than ten days prior to the date of hearing, said cause was heard in the rooms of the Commission, 401 State House, Indianapolis, Indiana, at 9 A. M., Wednesday, May 26, 1937, with appearances as above noted.

The evidence in this cause shows that the applicant proposes to transport beer and beer containers for the Terre Haute Brewing Company throughout the state of Indiana.

The evidence further shows that the applicant has been and is engaged in such operations over certain designated authorized routes; that said shipper has been, is, and will continue operating its own equipment consisting of six trucks, whether or not this application is granted; that said shipper has set up and prescribed rates for the proposed operation; that said rates are from 3 to 5 cents per hundred pounds less on beer and from 2 to 3 cents per hundred pounds less on empty containers than common carrier rates.

The evidence further shows that the shipper will add necessary trucking equipment to meet its growing needs unless it can obtain said transportation service at the proposed rates.

The Commission, having considered the evidence, now finds that the rates which the applicant proposes to charge or receive for the proposed service do not bear a reasonable relationship to the rates of common carriers for substantially the same service and that said proposed rates would give advantage or preference to the applicant in competition with common carriers.

The Commission further finds that to grant the application would be giving approval to the cutting of rates as is proposed by the applicant and ship-

per; that to grant the application would not be in the public interest; that a permit to operate motor vehicles as a contract carrier of beer and beer containers, intrastate, should be denied, and it will be so ordered.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Re General Order No. 28

[Supplement No. 1.]

Monopoly and competition, § 54.1 — Coöperative associations — Filing of maps.
Coöperative associations organized to furnish light or power to stockholders or members on a nonprofit basis, under a statute restricting construction by electric companies where such an association has filed a map and statement as to area to be included in the project, should file a copy of such a map with any public utility serving the area with light or power.

[August 17, 1937.]

GENERAL ORDER *relating to filing of map of proposed territory to be served by a coöperative association.*

By the COMMISSION: Section 418, Art. IV, of the Public Utility Law provides that, "If a bona fide coöperative association has been organized to furnish light or power service to its stockholders or members only on a nonprofit basis, and has filed with the Commission a map of the territory to be served by such association and a statement verified by oath or affirmation showing that a majority of the prospective customers in the area are included in the project, no public utility shall begin the construction or installation of any new plant or system, or the construction or installation of any extension, improvement, or addition to its existing plant or system for furnishing light or power service within said territory until the expiration of six months from the date of filing of such map and statement. . . ."

In order to prevent unnecessary conflict of interests, and to avoid complications productive of delay, the Commission is of opinion that a copy of the map of the territory to be served by the coöperative association should be filed with any public utility serving the area with light or power; therefore,

Now, to wit, August 17, 1937, it is *ordered*: That any coöperative association filing a map of its proposed territory with the Commission under the provisions of § 418, Art. IV of the Public Utility Law, shall at the same time file a copy of such map with every utility rendering light or power service within the territory to be served by such association.

Industrial Progress

Commonwealth Edison Plans Unit for Northwest Station

THE Commonwealth Edison Company, Chicago, is planning the installation of a 50,000 kw, 1,200-lb. generating unit with accompanying boiler installation at its Northwest Station, according to a recent announcement. The new equipment is to be operated as a topping unit on the 225-lb. turbines now in service in that station. It is expected that the installation will be ready for service sometime in 1939.

International Harvester Moves General Offices

INTERNATIONAL Harvester Company announces removal of its general offices to the new Harvester Building, 180 North Michigan Avenue, Chicago, Illinois.

All business of the general offices will be handled from the new address, and all mail for the Company should be directed accordingly. The new location is at the southwest corner of Michigan Avenue and Lake Street, exactly nine blocks north of the old Harvester Building, which the Company has occupied since 1907.

Record Set in Sales of Electric Appliances

MANUFACTURE of household electric appliances has not only made up all depression losses but is forging ahead to establish new production records, according to *The Index of the New York Trust Company.*

"During the present year, the expanding production and increased sale of electrical appliances which characterized the industry during 1936," *The Index* says, "have proceeded at, if anything, an accelerated rate. During the first seven months of 1937, as reported to the National Electrical Manufacturers Association, representing 92 per cent of the industry, sales of refrigerators totalled 1,867,000 units, a gain of 17 per cent over the total of 1,599,000 units in the comparable period of 1936.

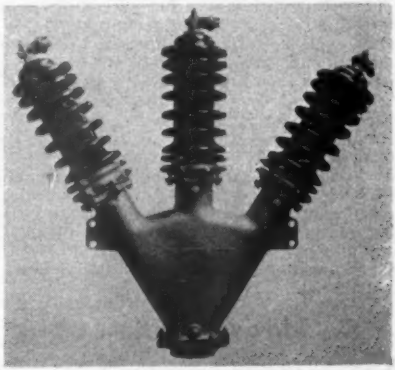
"For the first six months of the year, sales of electric washers showed an increase from 761,000 to 852,000. Unit sales of electric ranges for a group of twelve manufacturers were up from 158,000 to 226,000 in the same period, their value rising from $10,938,000 to $16,034,000; water heater sales for another group of manufacturers showed a gain of 48 per cent in number and 51 per cent in value, and sales of floor vacuum cleaners increased 27 per cent and 25 per cent in value, while corresponding figures for hand vacuum cleaners were 48 per cent and 47 per cent.

"With the saturation point for the greater number of appliances still far off, especially those in more expensive categories, this improvement should continue."

Outdoor Cable Terminator

DELTA-STAR Electric Company, Chicago, Illinois, announce that they have developed a new improved type cable terminator.

This three-conductor-Terminator (shown in accompanying illustration) used on 27



Three-Conductor Terminator

K.V., 500 amp. cable, is rated 34.5 K.V. and has 18" striking distance between phases at the porcelain bushings.

The body is of high strength aluminum alloy, so designed that the amount of filling compound is a minimum giving low shrinkage effect.

The separately mounted wet process porcelain bushings permit field replacement without disturbing other bushings. Cemented joints are absent and no current is carried through threaded joints.

Vacuum and water tight they may be oil or compound filled. An inverted type wiping sleeve entrance is supplied permitting the use of a wiped cable joint with the Terminator mounted on conduit.

Link-Belt Issues Booklet on Radiostat Stoker-Control

THE Link-Belt Stoker Division has issued a new folder No. 1518-A describing the Radiostat, an electronic temperature control

for stoker installations in hotels, apartment and office buildings, and other locations where the ordinary type of thermostatic control is not practical.

The Radiostat achieves uniformity of temperature by balancing three different elements in its control of stoker operation. These are outside temperature, return line temperature and boiler pressure. Savings up to 20 per cent in the use of steam, in addition to savings on fuel cost up to 40 per cent, are being effected by Radiostat installations.

A copy of Folder 1518-A will be sent upon request addressed to Link-Belt Company, 2410 West 18th Street, Chicago.

Burroughs Calculator with Direct Subtraction

BURROUGHS Adding Machine Company announces an entirely new calculator development—direct subtraction—now available on the Electric Duplex Calculator.

This new machine not only accumulates a grand total of individual or group totals, making recapping unnecessary, but with the direct subtraction feature it is easy to deduct amounts directly from the grand total by merely touching a key, according to the manufacturer.

There is a wide variety of time-saving uses for this unique Burroughs Calculator. In preparing invoices, extensions are automatically accumulated to provide a total without re-adding, and discounts are deducted directly from the grand total without the use of complementary numbers. The machine also greatly simplifies such figuring jobs as payroll, inventory, requisitions, cost figuring, sales analysis, statistics, etc.

Moving Millions

MOVING millions of people in our cities with modern electrical transportation equipment provides the material for an interesting and entertaining sound motion picture that has been filmed by the General Electric Company. Designed to appeal primarily to transit operators, power companies, city officials, and security-holders, the new 55 minute film shows how the use of modern electric vehicles has enabled transit companies in many different parts of the United States to increase their revenues during the past four or five years.

Modern trolley coaches, gas-electric and Diesel-electric buses, all-service vehicles, rapid-transit cars, and President's Conference cars are featured in the film which shows their use in 24 cities. Local-color scenes of each city, and quick shots of how its progress has been influenced by the use of electricity, are followed by a display of the modern electric transportation used in that locality. Efforts of transit companies to merchandise inexpensive and comfortable rides in order to make customers of automobile users are also shown.

The film had its premiere showing at the recent American Transit Convention at White Sulphur Springs, W. Va., where it was presented before more than 1000 transit executives from all parts of the country.

Service Manual Provides Vital Data

AN entirely new Clarostat Service Manual is announced by Clarostat Manufacturing Co., Inc., 285-7 N. Sixth St., Brooklyn, N. Y. Containing well over 200 pages, this handy pocket-sized manual should prove to be of great value to the servicemen. It provides the extensive listings of exact-duplicate and standard volume controls and resistor-tube replacements for all standard types of sets, as well as circuit diagrams, servicing hints, ballast data, attenuator data, and other valuable information. The compilation has been under way for many months. Clarostat engineers have contacted set manufacturers and reviewed all existing service manuals, data sheets and other sources.

A copy of the manual may be secured by any serviceman, without charge, by writing on his business stationery, or asking his local jobber.

I. B. M. Factory Training School at Endicott, N. Y.

INTERNATIONAL Business Machines Corporation has started its Factory Training School for employees at its main plant in Endicott, N. Y., with 1,650 enrollments in 30 different courses, according to a recent announcement. This is the greatest enrollment and the largest number of courses in the history of the educational department, which was organized by Thomas J. Watson soon after he became president of the company in 1914. There are approximately 4,000 employees in the Endicott plant. Enrollment is voluntary; the courses are given without charge and all lesson material is furnished by the company, which also maintains a very complete reference library for the use of the students.

The courses given in the school include blueprint reading, shop practice, two courses in shop mathematics, three courses in electricity, motion economy, measuring instruments, milling practice, heat treatment, drilling practice, three courses in mechanical and electrical principles, elements of mechanism, a four-year course in manufacturing analysis, tabulating machine assembly, time-recording assembly, a three-year background course in mechanical and electrical principles of tabulating machine equipment, first aid, business English and letter writing, a three-year course in accounting, practical English, industrial organization, effective speaking, a supervisors' course, and a basic course on the operation and application of the company's products, which include electric bookkeeping and accounting machines, time recording devices and systems, all-electric writing machines and industrial scales.

The educational department in the company's schoolhouse at Endicott is the head-

quarters for the employee educational system which covers its worldwide organization through extension courses and each year gives some form of instruction to approximately one-quarter of the company's more than nine thousand employees. The purpose of the educational work, according to Dr. Garland B. Briggs, dean of IBM schools, is to aid those employees who desire to further their education and prepare themselves for positions of greater responsibility.

"Customers' Records"

A 20-page booklet, 8½ by 11 inches, describing various methods of keeping customers' records, has been published by the National Cash Register Company, Dayton, Ohio. The Unit Plan and the Dual Plan as used in machine bookkeeping are illustrated and described in detail.

National typewriting-bookkeeping machines and posting machines, which have been developed to fit the various methods of posting, are pictured and their operation explained.

A large broadside folder, recently issued by the National Company also illustrates and describes 19 accounting and bookkeeping machines built for specific jobs, including billing, checkwriting and signing machines used in public utility work.

Copies of both booklets may be obtained from the National Cash Register Company, Dayton, Ohio.

Rubber Bladed Fan Patent Granted Samson-United

A U. S. Patent Office grant, covering the manufacture of rubber and flexible bladed fans, recently was awarded A. O. Samuels, President of Samson-United Corporation, Rochester, New York, vesting manufacturing rights for a period of seventeen years.

For several years Mr. Samuels experimented with canvas, paper, and other flexible substances. Finally, both hazards and injuries, as well as noise, were eliminated in one stroke with the development of the soft rubber blade that moved as much air as ordinary fans, by actual laboratory test.

A radically different change from the first electric fan introduced by Dr. Schuyler S. Wheeler, of Ampere, N. J. in 1886, the rubber bladed fan was placed on the market in the spring of 1936.

Insurance companies and other agencies campaigning for greater safety in home and office, have hailed it as a marked advance, according to the manufacturer. Besides, the fan has had widespread public acceptance among motorists for defrosting windshields in winter and air-cooling cars in summer.

Because of its revolutionary nature, the rubber-bladed fan bids fair to vitally change the various methods of electric fan manufacture. *Business Week* only recently had this to say, "Sales this year of all type fans are expected to top the 1929 volume. Even higher-priced fans are finding a market, and the growing interest in rubber blade fans suggests that these will constitute about half the sales next season."

Special arrangements to license other manufacturers under his patents may soon be made, Mr. Samuels said in commenting on the patent award.

Plans New Generating Unit

THE Iowa Public Service Company is planning a $23,000 plant improvement program, according to a recent announcement. This will involve the installation of a new generating set and a motor-driven circulating pump for hot water heating system.

Kansas Gas & Electric to Build New Plant

KANSAS Gas & Electric Company has announced an expansion program whereby a 20,000-kw. plant will be built to add to the capacity of the two plants already operated in eastern Kansas. The new plant will be located at the north edge of Wichita. A 40-acre tract of land on the Little Arkansas River has been acquired for the site. It is expected that the plant will be completed by August, 1938.

The plant will be a single 20,000-kw. unit. It will be tied in with the Wichita plant, which consists of two 10,000-kw. units and one 6,000-kw. unit, and the Neosho plant, consisting of one 20,000-kw. and one 15,000-kw. unit, located at Parsons, Kan.

Earl Doty Becomes Advertising Manager of Delco-Frigidaire

APPOINTMENT of Earl D. Doty, widely experienced advertising man, as advertising manager of Delco-Frigidaire Conditioning Division, General Motors Sales Corporation, has been announced by E. G. Biechler, general manager. Mr. Doty has been a member of Mr. Biechler's staff.

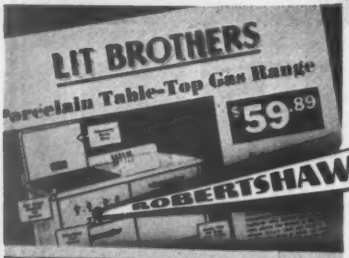
In his new post, Mr. Doty will be in charge of advertising covering General Motors' automatic heating and air conditioning activities.

Mr. Doty has been with Frigidaire and its predecessor company, Delco-Light, for twenty-one years.

Merrill N. Davis Elected President of A. G. A. E. M.

AT the Second Annual Meeting of the Association of Gas Appliance and Equipment Manufacturers recently held in Cleveland, Merrill N. Davis, executive vice president and secretary of the S. R. Dresser Manufacturing Company, Bradford, Pa., was elected president of the association.

E. R. Guyer, vice president of the Cribben and Sexton Company, Chicago, Illinois, was elected vice president and Donald McDonald, secretary of the American Meter Company, New York, N. Y., was reelected treasurer of the association.



RETAIL STORES PLAY UP "ROBERTSHAW"

in their newspaper ads

Thermal Eye

REG. U. S. PAT. OFF

OVEN-HEAT-CONTROL HELPS THEM SELL RANGES

We leave it to you! Successful dealers display Thermal Eye Control in valuable advertising space because it pays them well!

They spotlight the name Robertshaw because it carries weight with customers.

They're smart—those dealers. They know how to put their fingers on features that give a plus to selling. That's why they play up Robertshaw

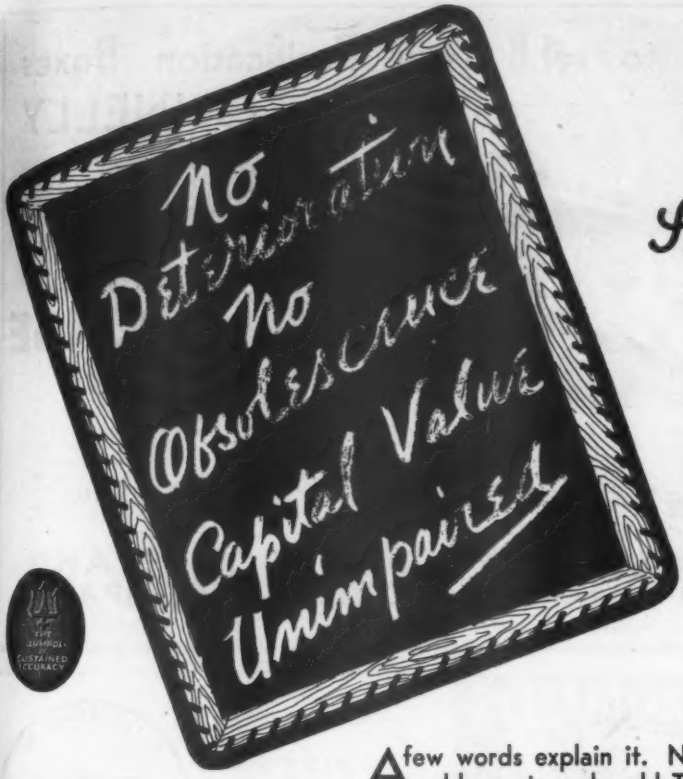
Follow their tested selling system. Feature Robertshaw Thermal Eye Control in *your* ads. Capitalize the fact that Robertshaw is the oven-heat-control that's known by women everywhere—respected, trusted, desired!

It signals

Robertshaw's Thermal Eye Control swings a red signal into view when the oven reaches the desired preheat temperature. It's an eye-catcher—an action-getter—a feature that makes the entire range more attractive to the customer.

MORE THAN 2,000,000 ROBERTSHAW CONTROLS NOW IN USE

ROBERTSHAW THERMOSTAT COMPANY
YOUNGWOOD, PENNA.



Simple as

A

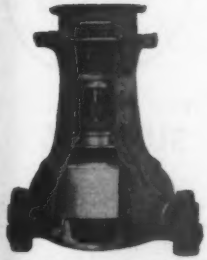
B

C

A few words explain it. New Interchangeable parts make old Trident and Lambert Water Meters New.

BUT this is only one of the many features of these Quality Water Meters. There's a type made for every service.

CATALOGS from Neptune Meter Co., (Thomson Meter Corp.,) 50 W. 50th St., (Rockefeller Center), New York City. Neptune Meters, Ltd., 345 Sorauren Avenue, Toronto, Canada.



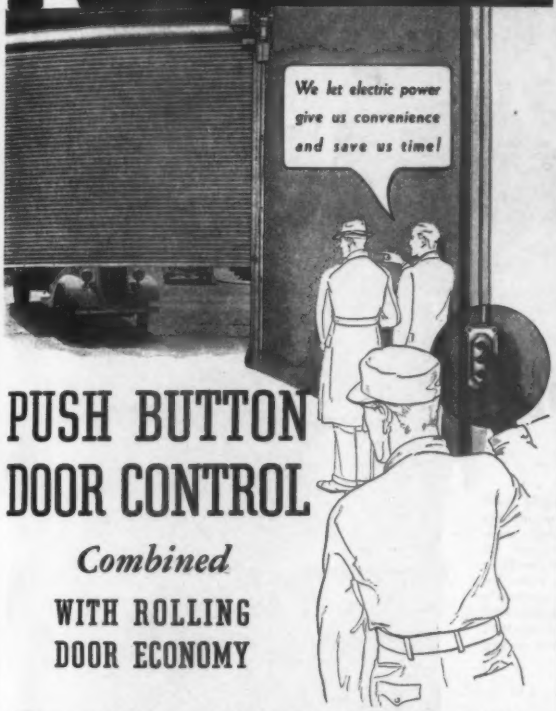
This Neptune Meter Casing (cut away) is 38 years old. The parts are modern. Both Frost-Proof and Split-Case types are protected by Interchangeable Parts.

TRIDENT

and LAMBERT WATER METERS

OVER 6 MILLION MADE AND SOLD THE WORLD OVER

KINNEAR
MOTOR OPERATED ROLLING DOORS



PUSH BUTTON DOOR CONTROL

Combined

WITH ROLLING DOOR ECONOMY

Time saved is money made. That's why electric door operation catches the eye of today's building owner. It brings speed and convenience to the operation of service doors. Push button controls may be located at any number of strategically located points so that people with other duties can open and close doors without wasting time, steps and money.

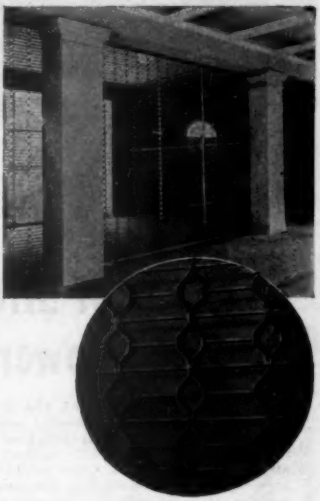
Add these advantages to the time proven virtues of UPWARD ACTING KINNEAR STEEL ROLLING DOORS, and you have an ideal combination. Accurately counterbalanced and coiling above the lintel, Kinnear Doors are out of the way, save floor and wall space, are unhampered in operation by ground obstructions and less subject to damage. When open they are out of the way of moving vehicles and where wind cannot blow them closed or damage them. All in all a combination of features that should not be overlooked on any job.

The **KINNEAR**
Manufacturing Company
2060-80 Fields Ave. Columbus, Ohio

KINNEAR ROLLING GRILLES GIVE PROTECTION

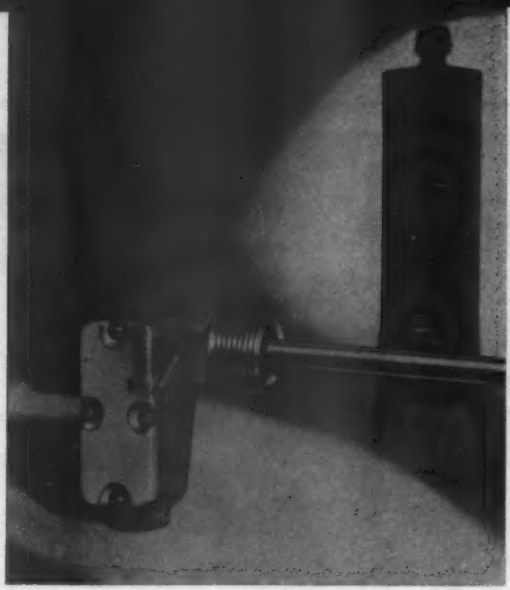
UNOBSTRUCTED AIR, LIGHT AND VISION

BUILT BY DOOR EXPERTS



True to Kinnear tradition, the new design of Kinnear Rolling Grille offers another outstanding contribution to the building industry. Innumerable situations requiring protection against trespassing, burglary and intrusion can now be successfully met . . . with the added advantages of full vision and admittance of air and light. Like a window blind, coiling above the opening and spring counterbalanced it operates easily, conveniently and with space economy. When closed and securely locked, it provides an impassable barrier. And when open, it is an unnoticed guard which is always on call.

Artistic in design and built in any size or metal, there is practically no limitation to the places it can be permanently installed in old or new buildings. Composed of round steel bars and ornamental pressed steel links, the grille proper is of remarkable strength. Write for complete details.



As Is Your Thermostat, So Is Your Storage Heater

You will agree that the success of an automatic storage heater depends in large measure upon the performance of its thermostat. Look well, therefore, to that angle.

Your aim is to increase consumer satisfaction. That means, in the present instance, a thermostat upon which the user can depend at all times—which reduces your servicing to a negligible minimum—which consistently builds good will for you in your community.

The Titan Snap Action Thermostat fulfils these requirements. It is known for its universal reliability even under the most severe conditions. Titans are already standard equipment on most storage heaters approved by the American Gas Association. Their enviable record warrants your complete confidence.

THE TITAN VALVE & MANUFACTURING COMPANY

THERMOSTATS «» SAFETY PILOTS «» RELIEF VALVES

9913 Elk Avenue **Cleveland, Ohio**

TITAN

WATER HEAT
CONTR

Whether You Buy A Tankful Of Gasolene Or A Carload Of Oil—You Can Be Sure That CITIES SERVICE PRODUCTS *Are Unsurpassed!*

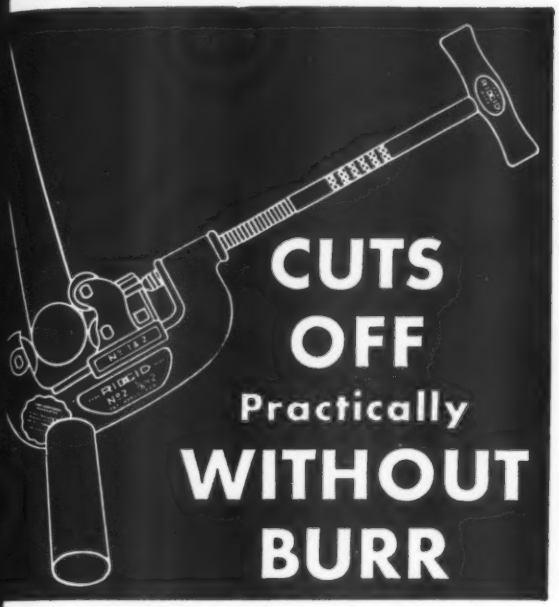
THE QUALITY of Cities Service gasolenes, oils and greases is guarded every step of the way from the oil well to you. For Cities Service is a completely integrated unit in the oil industry, engaged in all phases of petroleum operation... production, transportation and refining. The finished products, backed by 74 years of refining experience, reach you through 15,000 reliable outlets. The Cities Service emblem is your guarantee of dependable products and efficient, courteous service.

CITIES SERVICE  *Serves A Nation!*

INDEX TO ADVERTISERS

(Concluded on Page 80)

INDEX TO ADVERTISERS (Concluded)



CUTS OFF Practically WITHOUT BURR

And This RIDGID

hin Tool-Steel Blade Wheel Is The Reason

you want a new experience that will show you how quick- easily and cleanly pipe can be cut, try a RIDGID utter.

u'll find the patented RIDGID Cutter wheel a real provement. Coined out of tool steel sheet, hammered, at-treated and cast into a steel-bearing hub, it rolls artly through any pipe, practically without burr—many re cuts per wheel. *Try one at your Jobber's.*

Save 75% Of Your Pipe Wrench Repairs

The RIDGID Wrench housing is unconditionally guaranteed not to break or warp—so goodbye to 75% of your wrench repairs.

RIDGID PIPE TOOLS

he
idge
ool Co.

Elyria, Ohio

"FASTER! FASTER!"

HOW delightful, how interesting—even today—that famous fantasy of Lewis Carroll! Remember? Alice and the Red Queen were running hand in hand. The Queen went so fast it was all Alice could do to keep up with her. And still the Queen kept crying, "Faster! Faster!" But Alice could go no faster though she had no breath to say so.

Exhausted, she finally sat down and looked around her in great surprise to find that with all her running she was still under the same tree and apparently had made no progress.

"Well," said Alice to the Queen, "in *our* country, you'd generally get somewhere else—if you ran very fast for a long time, as we've been doing." "A slow sort of country!" said the Queen. "Now, *here*, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

How well this expresses the conditions in modern industry. "To get somewhere else"—to make progress—the electrical industry must move faster than ever before. In load building, we must have Better Light—Better Sight, the Electrical Standard of Living, and other power-sales programs. In engineering, we must work with higher steam pressures, higher temperatures, new dielectrics, higher-speed circuit breakers—new, more efficient designs of all types of equipment. The only way to better service and reduced costs is progress. And the only way to progress is through the purchase of equipment from those manufacturers who have the experience, personnel, and facilities to do this kind of work.

GENERAL ELECTRIC

96-4-68